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ABSTRACT

This SPEC kit which contains its accompanying SPEC Flyer prepared by the Systems and Procedures Exchange Center (SPEC) focuses on strategic planning. A planning process which emphasizes redefining goals and objectives and reordering priorities based on a dynamic environment, strategic planning has been considered to be particularly applicable to the continuous technological flux and constantly changing situation of research libraries. In designing this survey on strategic planning, the ARL (Association of Research Libraries) was especially interested in finding out how libraries have implemented strategic planning during the last five years, how useful it has been to those libraries, and, particularly, how successful it has been. Sixty-nine of the 199 ARL libraries responded to the survey, and of those 47 indicated they had produced a written strategic plan since 1989. Thirty-one libraries indicated that they had used other processes such as TQM (Total Quality Management), focus groups and surveys, planning task forces, retreats, long-range planning, and so forth. Of the 47 libraries with strategic plans, 38 have ongoing formal planning processes, only 12 of which were in place prior to the initiation of strategic planning. Most libraries initiated strategic planning as a response to the complexity of issues facing research libraries in the 1990s. Stimuli included the need to maintain current levels of acquisition and more services, especially electronic access, the university, or a new library director. Eighteen of the 47 libraries used a consultant. In most cases the director (24) or the assistant director (16) had responsibility for the process. Almost every library reported that strategic planning has enabled the library to address the key issues that generated the need for strategic planning in the first place. It has enabled the library to make informed decisions about the allocation of time, personnel, and money, and has provided an overall structure in which to set priorities. The main body of the SPEC kit is comprised of examples of strategic planning from the University of Alberta (Canada), the University of British Columbia (Canada), Brown University (Massachusetts), Emory University (Georgia), Harvard University (Massachusetts), the University of Kansas, Louisiana State University, the University of Pennsylvania, Purdue University (Indiana), and the State University of New York at Albany. Contains a 13-item selected bibliography. (Author/MAS)

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SPEC

SYSTEMS AND PROCEDURES EXCHANGE CENTER

Kit 210

Strategic Planning in ARL Libraries
August 1995

ED 387 131

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SPEC
SYSTEMS AND PROCEDURES EXCHANGE CENTER

Flyer 210

Strategic Planning in ARL Libraries
August 1995

INTRODUCTION

Strategic planning, which emphasizes redefining goals and objectives and reordering priorities based on a dynamic environment, has been considered to be particularly applicable to the continuous technological flux and constantly changing situation of research libraries. In designing the survey on strategic planning, we were especially interested in finding out how libraries have implemented strategic planning during the last five years, how useful strategic planning has been to those libraries, and, particularly, how successful it has been.

In certain circles strategic planning has been considered to be somewhat out-of-date and passé. But recently we have read about the "fall and rise of strategic planning," and the results of our survey certainly indicate that strategic planning is alive and well in ARL libraries. It appears to be far and away the most common mode of planning and with few exceptions has been deemed successful by library and university administrators.

Since 1989, when the previous SPEC Kit 158 *Strategic Plans in ARL Libraries* was issued, at least 47 ARL libraries have undertaken a strategic planning process. The process has varied as both a reflection of a particular library director's philosophy of administration and planning, and as a reflection of the library's culture. Thus each library's process has been idiosyncratic to some degree, but all of them share common elements. From those commonalties we may draw a number of generalizations and point out several pertinent trends and issues that will be useful for any large academic and/or research library contemplating the strategic planning process.

SURVEY RESULTS

Sixty-nine of the 119 ARL libraries responded to the survey, and of those 47 indicated they had produced a written strategic plan since 1989. Strategic planning was by no means the only planning process used by responding libraries. Thirty-one libraries indicated they had used other processes such as TQM, focus groups and surveys, planning task forces, retreats, long-range planning, and so forth. Most of the plans have been produced in the last three years, and of the 47 plans produced in the last five years, 33 have been reviewed or updated, 14 on an annual basis.

The Library's Planning Process. Of the 47 libraries with strategic plans, 38 have ongoing formal planning processes. Only 12 of these planning processes were in place prior to the initiation of strategic planning, and in most instances were mandated by the university and tied directly to the university's own planning process; the remaining 26 libraries established ongoing planning as a result of undertaking strategic planning. Typically the director or an assistant director takes direct responsibility for the formal planning process, but the process is often managed by a senior management group or a committee.

Formulation of the Library's Strategic Plan. Most libraries initiated strategic planning as a response to the complexity of issues facing research libraries in the 1990s. The need to maintain current levels of acquisition, and to provide more services, particularly new kinds of electronic access, while faced with diminished resources, has been a powerful stimulus for initiating a strategic planning process. In some instances, however, the impetus came from the university (11), and in a few instances from a new director (3). But in almost every instance, strategic planning was initiated in an attempt to resolve the dilemma facing research libraries today of the necessity of "doing more with less."

The process usually takes about a year to accomplish, though one library reported it took only a few weeks and two others reported it took two years. Eighteen of the 47 libraries used a consultant, though those that did indicated a positive experience noting that the consultant brought experience, an impartial perspective, and was generally a great help in keeping the process going. In most instances the director (24) or an assistant director (16) had responsibility for the process, though often with the assistance of designated staff or a committee. Another model was the use of a carefully selected representative committee to guide the process (5). The director most often either guided and had a major role in writing the plan (23) or offered key advice to those who directed the process (17). In three instances the director simply received the plan and in one instance had no role at all. Twenty-eight libraries used retreats, and almost all found them useful, particularly as a way to kick off the process, as an opportunity to bring senior managers together for a concentrated period, or to bring a representative group from across the library together for a concentrated period.

Staff were most often involved in the process through periodic open meetings (40), by serving on task forces (37), by placing articles on strategic planning in the library's newsletter (22), or by creating a separate newsletter for strategic planning (11). Library users were most often involved through informal discussions (22), through formal interviews with key members of the university community (18), as members of task forces (14), through the university library committee (12), through user surveys (8), or in formal open meetings (7).

The Outcome of Strategic Planning. In almost every instance, libraries report that strategic planning has enabled the library to address the key issues that generated the need for strategic planning in the first place. It has enabled the library to make informed decisions about the allocation of time, personnel, and money. It has provided an overall structure in which to set priorities, and has allowed the library to capitalize on targets of opportunity. For eight libraries it has enabled them to make a successful case for increased funding, upgraded positions, or increased support for electronic resources. It has given the library a positive self-image and profile on campus, and focused the university's attention on the library. During hard times it has allowed the library to stay focused. It has revitalized thinking, and enabled the library to review services and effect organizational change. One respondent summarizes the outcome of creating a strategic plan, "We now operate more as one library rather than a number of individual libraries. We have been able to make successful proposals to the university administration and to donors to fund new and enhanced services and resources. We have become campus leaders in introducing new information technologies."

ISSUES, TRENDS & CHALLENGES

Change is often difficult for individuals and organizations alike. The very act of strategic planning, which requires a reassessment of values and assumptions, can be threatening, and resistance to even participating in the process by those who have an investment in past practice may be strong. Survey respondents note how important it is to involve as many of the staff as possible and at all levels. It is easy to criticize the process from isolation, but far more difficult from within the process, and indeed the critic may become involved and find value in the process. It is equally important to involve and gain the support of the university administration. Several respondents note that without such support, even the best plan will be severely crippled. One university administrator looked at the library's plan with a bemused smile and responded, "That's nice. Thanks." Clearly it is essential to work with the university administration from the very start and make key administrators part of the process. Likewise it is important to involve all of the library's constituencies in some way.

In some instances, however, the real problem has been the library's culture and the most immediate goal has been to change that culture in ways that will enable the library to become revitalized and foster new thinking. Libraries that spend only a few weeks or months on strategic planning cannot address, or choose not to address this issue. It may be that the library's culture is already responsive to planning or that the administration itself is unwilling to break with the past. Without broad participation by staff and others it is relatively easy to formulate a reasonably good plan in a short time. Several libraries have taken this route and advise others not to get bogged down in process. But it is the process itself with its requirement of broad participation that makes the plan work. As one respondent put it, "If you want to transform your organization, the process of planning is more critical than the plan you create, because participation in the process changes people, which is the real definition of organizational change."

The period after the formulation of the plan is critical. The plan must be acted on and serve as the central guiding document for the library, but even more, it must be seen to be so. It is important to maintain staff support and affirm that the intense effort that went into the plan is being sustained. Otherwise the organization will begin slipping back into complacency and lassitude.

Forty-four of the 47 libraries that produced strategic plans in the last five years believed the effort worthwhile. Two were not sure (one because it was too early to know and the other from a library that used a variety of planning techniques). One plan failed because of a lack of administrative follow-through. Another plan would have succeeded (and thus the respondent felt it would have been worthwhile), except that a new director did not support it.

CONCLUSION

In summary, one respondent wrote: "We have developed a plan that has provided a workable guide to directions and priorities and, in the process, developed new ways of working within the Libraries and the University to make our strategies happen. Changing the culture, which has added to the time and effort required by the planning process, has been fundamental to our ability to implement the programs and actions outlined in our plan."

This Kit and Flyer were compiled by Richard W. Clement, Associate Special Collections Librarian, University of Kansas and were prepared as part of the OMS Collaborative Research/Writing Program.

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SYSTEMS AND PROCEDURES EXCHANGE CENTER

Strategic Planning in ARL Libraries

A SPEC Kit compiled by

Richard W. Clement
University of Kansas

August 1995

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This year marks the 25th anniversary of the establishment of the ARL Office of Management Services. Committed to assisting research and academic libraries in the continuous improvement of management systems, OMS has worked with its constituents since 1970 to seek the best practices for meeting the needs of users. The OMS Information Services Program maintains an active publications program best known for its Systems and Procedures Exchange Center (SPEC) Kits. Through the OMS Collaborative Research/Writing Program, librarians work with OMS staff in joint research and writing projects. Pariticpants and staff work together in survey design, writing, and editing publications that provide valuable insights and management perspectives on emerging trends, issues, and concerns of the academic and research library community. Originally established as an information source for ARL member libraries, the SPEC program has grown to serve the needs of the library community world-wide.

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Kit 210

Strategic Planning in ARL Libraries
August 1995

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SURVEY RESULTS

ASSOCIATION OF RESEARCH LIBRARIES
OFFICE OF MANAGEMENT SERVICES

SPEC SURVEY - Strategic Planning

Name: ______________________ Title: ______________________

Library: ______________ Telephone: ______________ E-mail: ______________

1. Does the Library have a written strategic plan produced since 1989 (when the last SPEC Kit concerned with strategic planning was compiled)?

47 YES If yes, please complete the following questions.
22 NO *Please answer only question 1a, and return the survey to the address below.*

1a. Has the Library used any other methodologies for planning since 1989?

31 YES **33** NO
If yes, which methodologies? ______________________

TQM; regular administrative meetings; focus groups/surveys; retreats/topic specific groups; various committees; task force; executive group; parallel organization; "continuous adjustment to change"; teams for automation planning and new system implementation; program review; action planning; rolling 3-yr budget plan; self-study; consultant; long-range planning; annual review; 5-yr budget plan.

If another methodology was adopted instead of (or in addition to) strategic planning, please explain.

Planning process not bound by methodologies: we structure the process to fit our needs; adapted TQM = VIP; management by planning; continuous improvement; TQM; self study and external reviewers.

2. In which year was the Library's strategic plan produced? ______________

2	1989	**9**	1993
5	1990	**8**	1994
4	1991	**1**	1995
11	1992		

3. Has it been updated or reviewed?

33 YES **12** NO
If yes, when? ______________________

0	1989	**2**	1993
0	1990	**11**	1994
2	1991	**3**	1995
0	1992	**14**	Annually

- **The Library's Planning Process**

4. Does the Library have a formal ongoing planning process?

38 YES **9** NO *Please go to question 5.*

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4a. Was the ongoing planning process in place when strategic planning was initiated, or was it an outcome of strategic planning?

12 In place **26** Outcome

4b. How is the ongoing planning process structured?

13 Committee
30 Senior management group
14 Other (explain)
Library-wide priority setting; Administrative Council; Teams; Task forces; annual reports in each unit; annual work plans in each division; planning integrated into organizational structure; meetings with department heads

4c. Who has primary responsibility for the process? (Please give the person's title.)

24 Director
10 AUL
4 Council/committee
2 Planning officer
1 Consultant

4d. Does the process involve staff at the department/unit level?

37 YES **2** NO

4e. How are staff involved in the process? (Check all that apply.)

6 Separate newsletter or periodic publications on planning
17 Articles in Library's newsletter
26 Periodic meetings
29 Task forces/committee membership
14 Other (explain)
Annual performance review done in context of planning; staff input solicited; regular meetings of existing groups; departmental meetings; unit planning processes; division advisory groups; focus groups; requested input; e-mail; listservs

4f. Is the Library's planning process tied to the University's planning process?

29 YES **11** NO
If yes, please explain how.

11 tied directly to University's process

5. Why did the Library initiate the strategic planning process?

11 Mandated by Univ.
3 New director
2 Senior staff initiative
1 Part of reaccreditation
1 Preparation for fundraising drive

What were (are) the key issues?

12 Growth of electronic resources
10 Budgetary constraints
9 Changing client/service demands
4 Enable monitoring of performance
4 Storage/space
3 Access to information
3 Changing role of staff
3 Need to stimulate new thinking
3 Organizational structure
2 Preservation
2 Greater involvement of staff
2 Improve communication
2 Increasing materials costs
1 Need to achieve a common direction
1 Improve fund raising

- **Formulation of the Library's Strategic Plan**

6. How long did the process take? ____________________________

1	Few weeks	**15**	1 year
6	3-4 months	**4**	18 months
6	6 months	**2**	2 years
4	6-9 months		

6a. Did you use a consultant?

18 YES **29** NO

If yes, please explain the consultant's role.

Expertise in group decision making; assisted staff in reaching consensus; provided advice based on experience; organized the process; impartial conduit for staff views; facilitator; planning to plan; got things going initially; helped through the whole process.

6b. Who directed the process? (Please give the person's title.)

17	Director	**2**	AUL + SP committee
13	AUL	**1**	All AULs
2	Dir. + Planning officer	**1**	Director's council
1	Dir. + 2 designated staff	**1**	Planning Officer
3	Dir. + SP committee	**5**	SP Committee
1	Dir. + AUL		

6c. What was the role of the Director?

23	Directed the process and had major input in writing the plan
17	Offered advice
3	Received the plan
1	Liaison to Univ. Admin.
1	Member of the SP committee
1	None

6d. Were planning retreats used?

28 YES **18** NO

If yes, please explain if the retreats were useful.

Opportunity for dept. heads and administrators to exchange ideas; initially; senior management initiated process with a retreat; bring together a cross-section of the staff; useful for the retreat group, but not for others; useful for uninterrupted time; absolutely useful.

6e. How were staff involved? (Check all that apply.)

11	Separate newsletter or periodic publications on strategic planning
22	Articles in Library's newsletter
40	Periodic meetings
37	Task forces/committee membership
5	Other (explain) Dept. planning meetings; senior staff ideas and concerns were presented for discussion; focus groups; requested input.

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6f. How were library users involved? (Check all that apply.)

- **14** Members of committees or task forces
- **18** Interviews or meetings with selected key members of the university community
- **7** Formal open meetings
- **22** Informal discussions
- **28** Other (explain)
  - **12** Univ. Library Comm.
  - **8** User survey
  - **5** Not involved
  - **3** Focus groups

6g. Were there any particularly useful books, articles or reports from other libraries on strategic planning that you used? Please supply references for one or two of them.

see Selected Readings

- **The Outcome of Strategic Planning**

7. Explain how strategic planning has (or has not) enabled the Library to move forward and address the key issues identified in question 5 above.

- 9 Enabled informed decisions about allocation of time, personnel, and money; provides an overall structure; allows priorities; library better positioned to capitalize on targets of opportunity; proactive
- 4 Increased funding
- 2 Important communication tool: internal and external
- 2 Staff positions upgraded
- 2 Additional support for electronic resources
- 2 More positive self-image and profile on campus
- 1 Having concrete expectations is a great motivator when you have to be accountable
- 1 Kept the library focused during hard times
- 1 Enabled a review of services
- 1 Enabled organizational changes
- 1 Gave us goals and objectives that were achievable
- 1 Enabled staff to understand issues and goals
- 1 Revitalized thinking
- 1 Focused the University's attention on the library
- 1 Provided a roadmap for addressing issues
- 1 Enabled us to articulate our key issues more clearly
- 1 Enabled us to establish large measure of control over our environment: no longer driven by the latest crisis
- 1 Established cohesion of units
- 1 Enabled successful fund raising
- 1 Results were mixed

"Now operate more as one library rather than 15 individual libraries. Successful proposals to University administration and donors to fund new or enhanced services and resources. Have become campus leaders in introducing new information technologies. Greater emphasis on evaluation and assessment. More positive self image and profile on campus."

7a. What has been the response of the staff?

0 Resistance
26 Support
19 Mixed
Please comment:

Not all unit heads agree; SP is a top down process, a management tool; some view process as irrelevant; dislike amount of work involved in process and lack of detail in plan; some apathetic; pockets of resistance; small group does not like the accountability that goes with it; staff looking for concrete results from planning process; many had become complacent, while others welcomed change; because involvement was very wide, most staff developed an investment in the plan. "Some cynicism remains but, largely, pride in our accomplishments, satisfaction at having greater role in library direction setting and in University's mission. More of a family feeling. Now describe ourselves as 'change agents.'"

7b. What has been the response of the University administration?

0 Resistance
35 Support
6 Mixed
Please comment:

Univ. admin. sees library as a leader; "That's nice. Thanks"; made library priorities understandable to Univ. admin. "Praise from University administrators for state-of-the-art and cutting-edge library services and for change in the Libraries' culture. Increased financial support. Currently, invitation to talk about what support will be needed to create our vision of the digital library of the future."

7c. What has been the response of library users?

0 Resistance
17 Support
16 Mixed
Please comment:

Most users unaware; old-time die-hards in the faculty did not approve (remote storage); users don't see immediate improvement; some faculty concerned about changes.

8. What advice would you offer to another library about to embark on a strategic planning process?

9 Involve library staff; give everyone a voice
7 Involve as many constituencies as possible
5 Just do it! Don't wait to be told to do it
5 Ensure follow-through; keep plan and process ongoing
4 Ensure Univ. admin. is on-side
2 Don't get bogged down in process
1 Allow time
1 Review other SPs
1 Build on efforts already underway
1 Keep tight timeframe; don't get bogged down in traditional planning process of goals, objectives, action steps; environment is changing too quickly
1 Focus on changing the culture of the library
1 Get it to the unit level: simple and flexible
1 Strong leadership required for success
1 If your plan does not "feel good" to a new director it will die
1 Process is as important as product

1 Use of ARL consultant is an excellent investment
1 Having a plan is a terrific morale booster

"Develop planning process appropriate to your library. Build in participation, collaboration, and broad input of library staff and user groups. Include wide participation in ongoing refinement of vision. Foster an environment that supports the process. Link action to planning, since success along the way increases confidence and commitment. If you want to transform your organization, the process of planning is more critical than the plan you create, because participation in the process changes people, which is the real definition of organizational change."

9. Do you believe the time and effort expended were worthwhile?

44 YES **2** NO **2** NOT SURE
Please explain.

2 Important for everyone to know where the library is headed, what the priorities are, and what it will cost
1 Believe we will increase customer satisfaction
1 Enabled the library to articulate its vision and work toward it
1 We could not have accomplished nearly as much
1 No other way to envision future needs
1 First time in six years that I've been here that we systematically, and as a matter of explicit policy and intent, went to all staff for input in an important planning initiative

"We have developed a plan that has proved a workable guide to directions and priorities and, in the process, developed new ways of working within the Libraries and with the University to make our strategies happen. Changing the culture, which has added to the time and effort required by the planning process, has been fundamental to our ability to implement the programs and actions outlined in our plan."

10. Who at your institution can be contacted for further information on your strategic planning process?

Name: ______________________ Title: ______________________

Telephone: ____________ Fax: ____________ E-mail: ______________

Please include a copy of your strategic plan and any other relevant documents.

Thank you for your prompt response. Please return the completed survey by **15 December 1994** to:
Richard W. Clement
University of Kansas Libraries
Lawrence, KS 66045
(913) 864-4334; FAX (913) 864-3855 Internet: RCLEMENT@UKANVM.CC.UKANS.EDU

Responding Institutions

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Wayne State University
Yale University
York University

STRATEGIC PLANS

Riding the Wave

University Library
Draft Strategic Plan
1990 - 1995

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This draft strategic plan could not have been completed without the cooperation and assistance of countless individuals and groups. The genesis for the plan lies in the self-studies provided by the subject libraries and other units in the fall of 1989. The Library Steering Committee for the President's Advisory Committee on Campus Reviews distilled the major issues from these studies, and prepared position papers for discussion at a retreat for library managers February 12 and 13, 1990. We are grateful for the participation of all staff in this process, and to the faculty members who cooperated with the subject libraries in ensuring that their concerns were reflected in these self-studies.

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Director of Libraries	Library PACCR Editorial Committee
Ernie Ingles	BJ Busch Doug Poff

I. INTRODUCTION

> *We have come to an end of an era. Change has overtaken and replaced growth as the dominant driving force in . . . libraries. Librarians, as well as those who use and fund libraries, must come to terms with this new reality. It should be clear to all by now that libraries can no longer afford to do what they have tried to do in the past . . . The forces that have been transforming the library during the last decade are intensifying and accelerating. We will have to move quickly and decisively to take advantage of the opportunities such a climate of change offers. The library can either ride this wave of change or be overwhelmed by it.*
>
> *(Report of the Director of Libraries, University of Pennsylvania, 1981-82.)*

The University of Alberta Library System is under greater pressure today than in any previous period of its development. Strong forces are at work which must alter the way the System fulfills its mission. Changes in the technology affecting the methods and economics of collecting, storing, retrieving, communicating and displaying information are reshaping teaching, research and institutional management. Increasingly sophisticated library users, especially new faculty and entry-level students, bring a heightened awareness and an increased expectation to the search for information in pursuit of instructional and research goals. A major transformation is in the offing.

We must now ask the question: what future would we prefer for the University of Alberta? Whether the Library System will change should not be the question; the issue is how that change will be implemented. Will it be haphazard in response to external pressures, or will it be part of a planned evolution to further institutional goals, within some defined framework?

The forces transforming the System are intensifying and accelerating, and they are demanding considerable infusions of capital. The University can either make the investment, ride the wave of change and join the mainstream of progress; or be overwhelmed by the wave, caught in a backwash of antiquated products and services.

To place change within a meaningful context, the Library System has set about the preparation of a five-year plan, offering its vision for the future as well as strategies needed to build for that future.

. . . A strategic plan is ever changing and evolving, as is the library. While one might wish that the library's program could be completed, by its very nature, it never is. That is the future.

(Beverly P. Lynch, "Afterword", in The Academic Library in Transition: Planning for the 1990s. New York: Neal-Schuman Publishers, Inc., 1989, p. 391)

This plan addresses the immediate and essential requirements to maintain a high quality learning environment at the University. In its preparation, every effort has been made to be realistic and responsible. The plan communicates the Library System's goals and objectives to the University community. It also challenges that community with its responsibilities to the development of information services on campus.

The Library System submits this plan, using the process developed by the President's Advisory Committee on Campus Reviews, to the University for comment. The Library System is, in the final analysis, a service organization. To serve responsibly the Library must assure itself that its goals and objectives are acceptable to the academic community. Once this has been accomplished, tactical strategies and enabling financial projections will be put into place.

I. GOALS AND OBJECTIVES: SUMMARY

1. Libraries and New Concepts of Service

Goal: *To create a library focused on the information needs of the client, providing a balance of traditional and innovative information services, which ensure easy and rapid access to information resources whether locally or remotely held, in whatever format.*

Library Objectives:

1. Establish the Information Technology Services unit as the focus for services and product development within the Library System;
2. Develop improved means of defining user needs concerning library and information services through closer liaison with faculty representatives, user forums and surveys, participation in key university committees, and improved collaboration with other information providers, including University Computing Systems and media services on campus;
3. Within the context of defining user needs, look critically at the present array of services provided within the System for the purpose of balancing the service offering with available resources;
4. Develop instructional programs in information literacy, promoting through increased collaboration with faculty the integration of these skills into the curriculum and into research methods. The Library System would focus development particularly on its application of computer-based learning technology to extend instructional outreach and permit integration with other curricular activities;
5. Enhance library services through cooperative sharing programs both regionally and through high speed computer connections to other members of the North American research library community;

6. Develop improved personal consultation services for information management and techniques of network research, through more formalized personal contacts and efficient electronic mail communication between the library staff and client groups;

7. Create a document delivery system providing efficient transfer of materials in physical or electronic form to and from the University, ideally working toward the delivery of materials to users at their worksite on the University campus. This system will actively exploit the potential of FAX/OCR scanning and electronic file transfer technologies as these develop.

8. Achieve a balance between operational efficiency and service effectiveness by amalgamating collections and service points within the Library System. Work with other information service units on campus to develop acceptable terms and conditions leading to the amalgamation of these units into the Library System where appropriate.

9. Devise measures to assess the costs of services as a basis for managing the effects of fees on respective client groups, balancing current and new service offerings, allocating staff resources appropriately, and optimizing the benefits and reducing the constraints of decentralized service facilities;

10. Extend or broker library services more actively to the non-networked clients in the external community on a cost-recovery basis, utilizing the technological infrastructure for remote access provided to the academic community.

Challenges to the University:

1. Recognize and support the need to change institutional values toward increased cooperation with other educational institutions in the sharing of library and information resources. Support also the commitment of library resources to the development of resource sharing arrangements;

2. Work with the Library System in developing new budget models which recognize the increase in hard costs and in unit charges for information services, and the increasingly capital intensive nature of information services;

3. Review the applicability of the current 'library and computing fee' assessed by the University to students in the light of client perception with regard to its relationship to library services;

4. develop and implement, with a view to fiscal responsibility, evaluative criteria for departmental libraries and collections to determine where they provide unique resources best located within these departments, where access and use warrants duplication of central resources; or where amalgamation into the Library System is warranted.

5. Assess current curricula, and plan new programs with a greater recognition of the need to integrate information literacy skills into the learning process, and provide opportunities for Library System staff to serve on appropriate curriculum planning committees.

2. Automation and Information Technology

Goal: *To replace existing automated systems with integrated or integratable systems which strengthen access to traditional library services and collections; support the evolution of new electronic information services and network participation; and rationalize internal library operations by exploiting central automated processing systems*

Library Objectives:

1. Implement an integrated automated system, which adheres to emerging system and telecommunication standards, to replace the DOBIS online catalogue and existing disparate systems, and provide for:
   - convenient user access to locally owned and remotely held library materials and information including locally mounted and CD ROM databases with the capacity for reciprocal access to researchers elsewhere;
   - efficient bibliographic control, processing, circulation, and management information for multi-format collections.
2. Collaborate with University Administration and University Computing Systems in planning and implementing a campus information system which would serve as
   - a vehicle for access to local library and information resources or services;
   - a gateway to resources elsewhere over communication links like the INTERNET;
   - an electronic mail carrier for communication with campus clients, and with other institutions for resource sharing.
3. Improve hardware support for new information services within the library, including
   - installation of microcomputer lab facilities for client research/study activities and library information literacy programs;
   - installation of networked PC clusters in reference areas to support electronic information services both on CD ROM and on-line;

- acquisition of portable computing and projection equipment for library classroom use.

4. Upgrade the computing equipment base for Library System staff to enable them to initiate new information services and increase productivity for internal operations, beginning with the provision of pc workstations for all professional staff and appropriate associate staff.

5. Convert the remaining manual records of the Library System's card catalogue to machine readable form, incorporating them into the online catalogue.

Challenges to the University:

1. Undertake the immediate upgrade of the University's computing/ network infrastructure to support a campus information system;

2. Use the Office of the Vice-President (Student and Academic Services) to ensure that the campus information network develops with the close collaboration of University Computing, the Library System, and appropriate instructional technology units on campus;

3. Provide the Library System with the one-time capital resources necessary to migrate to new automated systems within two years ;

4. Provide additional on-going capital support to permit the Library System to implement new information technologies such as networked CD ROM database systems, and locally mounted datafiles, with a recognition of the corresponding increase in support required for University Computing.

3. Collections And Resource Sharing

Goal: *Work gradually toward the access/resource sharing model for collections services. Continue to support the research and instructional programs of the University, at defined levels, by timely acquisition, or access to, materials and information regardless of format. Identify and build collections of strength which would constitute the University's contribution to the 'virtual library'.*

Library Objectives:

1. Develop a collection policy for each discipline, or sub-discipline, recognizing varying dependence on serial/monograph literature, resource sharing possibilities, new formats, etc.;
2. Identify collecting areas of strength and determine their ongoing level of support;
3. Rationalize and restructure the materials budget according to priorities and levels set in policy statements;
4. Identify and develop strategic alliances with other institutions to maximize access to resources in complementary collections;
5. Develop and place before the University a comprehensive indexing formula for the purpose of protecting the materials budget from inflation and currency fluctuations.

Challenges to the University:

1. Work with the Library System in developing and implementing an indexing formula which would stabilize the purchasing power of the materials budget at a level defined by the academic program;
2. Develop workable policies and procedures that ensure a library impact statement, incorporating a budgetary assessment, for all new programs or significant changes in program curriculum;
3. Provide university support to the Library System's commitment to inter-institutional strategic alliances;
4. Empower the Library System to restructure the materials budget, based upon principles of equity among disciplines and upon a access/resource sharing model, understanding fully the implications of the impact of such a restructuring on the University community.

4. Staffing and Staff Development

Goal: *Within a challenging work environment for all levels of staff, continue to recruit, retain and develop a staff of the highest quality which is able to respond to today's pressures as well as prepare itself for the opportunities of the future. Create together a supportive environment which provides development opportunities to staff, thus better enabling them to meet the service needs of clients.*

Library Objectives:

1. Create the commitment among all staff to a service orientation;
2. Continue to develop within staff the attitudes and values consistent with the client-centered library;
3. Examine operations to ensure that the deployment of staff is appropriate to the programs and services offered;
4. Examine performance review and reward structures to ensure that effective and efficient service-oriented performance is recognized;
5. Provide a performance based feedback structure which is timely and is consistent across the system;
6. Develop appropriate mechanisms to recognize staff achievement;
7. Develop and implement a staff development program, as comprehensive as resources permit, and with particular attention to the problems associated with content plateauing;

Challenge to the University:

1. Recognize the staff of the Library System as significant partners in the academic enterprise of the University. Notwithstanding financial constraint, be willing to invest more in the training and development of staff as well as to press for the funding required to provide staff with the tools required to efficiently and effectively carry out the task which has been set: that is, providing library and information services which advance the quality of the teaching and research goals of the University.

5. Facilities and Space

Goal: *Provide physical space, equipment and facilities necessary to accommodate library collections, services, study, and technical operations.*

Library Objectives:

1. Make optimal use of its existing physical space to provide access to most heavily used collections, to accommodate current services and adapt to an expanding range of new electronic services, with attention to the environmental imperatives of collection preservation and user comfort, and to opportunities to consolidate service points where renovation permits;

2. Ensure that study and work space is provided for use of library materials and services in accordance with the University's commitment to a high quality learning environment and established standards for seating, recognizing the importance of these facilities with increased enrollments, and emphasis on graduate study and research;

3. Establish a remote stacks facility immediately to house and preserve more efficiently the 1.2 million volumes of research materials which over the next 15 years cannot be accommodated in existing library buildings;

6. Improve workspace conditions and furnishings for Library System staff, including space which permits the efficient integration of new automated systems.

Challenges to the University

1. Express a commitment to improving the working conditions and productivity tools required in the Library System, by providing capital funding adequate to equip the Library's internal working systems and public services for an increasingly electronic information environment;

2. Act upon the Library's urgent space crisis through funding support for the development of a remote stacks facility;

3. Provide study space according to accepted standards, whether within or outside the Library System, to accommodate student enrolments.

6. Preservation

Goal: ***Working with other institutions, the Library will seek cooperative solutions to preservation and conservation problems, and within a national framework, will develop a strategy to preserve selectively the intellectual content and physical format of its collections and corporate records.***

Library Objectives:

1. Support local, provincial, national and international efforts, where possible, in developing national preservation standards and strategies;
2. Within the context of a national strategy, establish priorities for identifying those areas of the collection to be preserved;
3. Integrate preservation routines into all operations;
4. Work with the Planning and Development Office and the Dept. of Physical Plant to create an environment that does not damage library materials;
5. Establish a leadership role in province-wide preservation efforts and consortial arrangements;
6. Develop for the University information management policies and procedures, including a records control systems for the classification and indexing of information, and records retention and disposal schedules for textual and electronic records.

Challenges to the University:

1. Recognize through budget adjustment the additional responsibilities of collection preservation and conservation.
2. Accept the need for a University-wide records management programme as a measure to improve the cost-effectiveness and efficiency of University administrative operations.

7. Key Operational Issues

Goal: ***To stabilize, then increase, the funding base of the Library System in order to provide the appropriate budgetary environment for the challenges of the next five years.***

Library Objectives:

1. Define, and then seek base funding for the casual staffing requirement in order to provide, to an agreed level, stack service and library hours of opening;
2. Initiate discussions through the Office of the Vice-President (Student and Academic Services) which would lead to the repatriation of photoduplication services, and resulting revenue, to the Library System;
3. Work with University Computing Systems to develop an alternate charging algorithm for computing services which would recognize the unique service and access requirements of the Library System. Create a stable budgetary environment for the future development and expansion of electronic information services;
4. In the absence of agreement to stabilize computing expenses, institute a pro-rated charge-back to University departments, based on student enrollments, for catalogue access;
5. Achieve an equilibrium in the operating accounts, through adequate inflationary adjustments;
6. Obtain a share of the University's regular capital grant equal to the Library System's percentage share of the University's operating grant;
7. Negotiate a moratorium on budget adjustment and stringency taxes;
8. Develop and implement a major, multi-year capital budget to carry out the major initiatives identified in the Strategic Plan.

Challenge to the University:

1. Recognize the cumulative impact of a decade of financial restraint, and work with the Library System to provide a responsible and realistic budgetary environment at a level consistent with achieving established goals and objectives.

II. SCANNING THE EDUCATIONAL ENVIRONMENT

A BRIEF OVERVIEW OF CONTEXT, PERCEPTION AND ROLE

The Alberta post-secondary system has entered a period of review, planning and change. The downturn in the Alberta economy has had a profound effect on funding for the educational system. At the same time, changes in society's expectations, in the tax-payers' "willingness-to-pay", and technological innovation are driving a re-examination of priorities and missions within higher education. These affect the way institutions such as the University of Alberta, and the Library System of the University, set strategic agendas and achieve their goals.

The importance of the University is understood by Albertans, but now more than ever before the University is in competition for scarce public financial support. In addition, the University is under increasing scrutiny as to what is being taught and the purpose and results of undergraduate education and the costs of graduate education. Finally, the dependence of teaching and research on computer and related technologies is evolving rapidly and has resulted in new levels of complexity within very traditional operational structures.

The Library System works within the context of this social and educational environment, sensitive to the circumstances of its host institution, to the imperatives of the provincial government, and to its role within the provincial and national community of libraries.

Post-Secondary Education In Alberta: Framework

"What framework should Alberta use in building for the future of university level education?"

This key question is posed and discussed in three planning documents issued recently by the Alberta Department of Advanced Education.

Trends and Issues in Post-Secondary Education, 1989 to the year 2000: Discussion Paper and *Responding to Existing and Emerging Demands for University Education: A Policy Framework for Discussion* together identify several major trends with regard to post-secondary education in Alberta. Among them:

Enrollments

Enrollments have increased at universities by 46% between 1979 and 1989, and while enrollments will fluctuate over the next 6 to 8 years, they will continue to remain high, rising dramatically once again as the decade of the 1990s draws to a close.

Marketplace expectations

There is growing pressure to meet the changing expectations of the student, the marketplace and society. These expectations include

- the increased use of high technology at the worksite;
- the need for graduates who have well-developed critical thinking, communication and problem solving skills;
- the changing profiles of the workplace and society;
- the need to compete effectively in the international marketplace.

Decentralization

There has been marked growth in the provision of educational opportunities throughout the Province. It is anticipated that the demand for basic university education, as well as for specialized and professional programs, will continue to grow in non-urban areas.

Technological infrastructure

Future challenges include ensuring the present infrastructure is adequately maintained and sufficiently adaptable to respond to changing technological needs for both students and faculty/researchers.

Clear directives to the post-secondary system are set out in the *Guidelines for System Development*. The document was developed in response to a number of challenges including the need for fiscal responsibility in a period of restraint, increased cooperation for program delivery, and longer-term coordinated planning.

Accessibility

A number of key principles influence the government's strategy for university-level education in the Province. Most relevant is that of accessibility; all Albertans should have the opportunity to participate in post-secondary education if their interests and ability so warrant. The University of Alberta too is firmly committed to the principle of accessibility, but it has been challenged in meeting its commitment by dramatic enrollment increases which, during a period of fiscal restraint, have not been matched by funding increases.

University enrollments over the past twelve years have increased, fueled in large measure by the re-entry into the system of students beyond the traditional 18-24 year age group. Operating grants have decreased by 19% in real dollar terms; capital grants have decreased by 68%. This has forced the University to protect the quality of its programs by first increasing admission standards, and finally by introducing quotas.

For many, accessibility means access to university level programs at a reasonable distance from home. To meet the demand some colleges have requested degree granting status. Three private colleges currently offer degrees at the undergraduate level. Some out-of-province institutions have received authorization to offer continuing education or graduate programs in the Province. Traditional university courses are also being offered in Alberta colleges and accepted for credit when students transfer to the University.

Program Rationalization

In response to these challenges, the *Guidelines* exhort the post-secondary system to find creative ways to fund new and/or updated programs. It further advises that the government intends itself to rationalize the system; that is, to ensure that unnecessary duplication is minimized, that program gaps are addressed, that the benefits of specialization are realized, and that ways are found to facilitate the ongoing renewal of each institution's core programs of study.

Encouragement is given to like institutions or those in proximity in a geographical region to propose collaborative activities among themselves which are of benefit to both students and the institutions involved.

The University Of Alberta's Response

In its official response to the discussion documents, and in particular, in its response to *Responding to Existing and Emerging Demands for University Education* . . . (July, 1990), the University reconfirmed its commitment ". . . to ensuring access by Albertans to quality education, and to strengthening graduate studies and university research . . .". It acknowledged the need for innovative inter-institutional arrangements, and increasing cooperation among post-secondary institutions with a goal of developing creative ways of meeting the needs of Albertans in the most cost-effective manner possible.

By way of caveat, the University pointed out the need to strengthen certain academic services as essential in support of these goals. One of these is the Library System:

> *A vital and well-supported library is of pivotal importance to the operation and to the stature of the University of Alberta; it is essential to both its instructional and research functions. Moreover, both Alberta and non-Albertan post-secondary institutions rely on the library resources of the University of Alberta. During the past year, the public's attention was drawn to the decaying state of our library, through pressures applied by our staff and students . . .*
>
> *(University of Alberta, Response to . . . **Responding to Existing and Emerging Demands for University Education: A Policy Framework**. Edmonton: University of Alberta, 1990, p. 4).*

In addition to the deterioration of its collections, the University's policies of ensuring access, as best as it is able, have resulted in additional problems. Increased enrollments have greatly increased usage, so much so that the Library System has found itself overwhelmed by student numbers. It is unable to control effectively access to its services and collections, unlike faculties which have imposed enrollment quotas.

Moreover, the changing demographics of society have produced a student population which is increasingly diverse in social, economic and cultural background. Many are attempting to balance full-time employment with their studies. These changes have had a significant operational impact on the System. For example, more attention to instruction is required for those students returning to University after some years away. In addition, the System is required to expand access to services in traditional non-peak hours in order to accommodate the increasing numbers of part-time students.

Transfer students require instruction and orientation to library services and facilities. Moreover, students in college transfer programs (and their faculty) are making demands on the Library System because college libraries are not always able to support the transfer programs which they offer.

University Strategic Planning And The Library

The University articulates its priorities in the face of declining resources, changing expectations and significant enrollment pressures in *Draft Policies: The Next Decade and Beyond* (October, 1987). Several of these priorities impact upon the Library.

Graduate studies

Notable was the priority to be accorded graduate studies, with a concomitant move to increase the percentage of graduate students to 20% of the student population (from 13%) over a fifteen year period. The document acknowledged the essential role played by the Library System in support not only of this goal, but of graduate studies in general:

> *A graduate school which offers research degrees can be no better than its library. The move to increase and improve graduate activity at the University of Alberta has profound implications for the University Library. The erosion of the last few years must be reversed if general, irreversible deterioration in the graduate studies and research realms of the University Library are to be averted.*
>
> *("The Next Decade . . ." p. 14.)*

Research Infrastructure

Similarly, significant attention was given to the 'Discovery and Dissemination of Knowledge'. It asserted strong commitments to maintain research and scholarship. Indeed its goal was to expand these efforts significantly, to play an increasingly significant part in the development of Alberta as a national and international research and scholarship centre.

If the University was to support effectively and responsibly those initiatives, it granted that the impact of changes in program, research, student mix, technology transfer, etc., on the Library System must be recognized.

Perhaps, most important of all, "The Next Decade . . ." noted ". . . a growing appreciation of the strategic importance of wisely managing information technology in large corporations, governments, and educational organizations." (p. 39.) And, it continued by stating that there was ". . . a positive correlation between the prestige and reputation of academic institutions, and both the absolute and percent expenditures on information systems. Universities regarded as academic leaders also seem to be leading with respect to information technology." (p. 41.)

Again, the Library System was seen to have a significant stake in the development of appropriate information technology and services:

- *It is considered that the automation of Library operations is essential for reasons of efficiency and to maximize the value of the University's investment in the Library and its collection . . . It is clear that major expenditures for the storage and processing of Library data, and for permitting telecommunication access to the Library data bases are inevitable. All of this activity is expensive, and in many cases requires new money. The increased efficiencies in management and information access by users justify this expenditure but it is difficult to show immediate and direct savings.*
  (p. 43)

The current status of *The Next Decade* . . . as an Academic Plan is not clear. However, the aforementioned issues will undoubtedly be constants in future planning initiatives.

The University's Mission

In his inaugural address, entitled "The Mission of the University of Alberta", newly installed President Dr. Paul Davenport stated his commitment to strengthening the national and international reputation of the University.

Reaffirming his commitment to research and graduate studies, he recognized that in an environment of fiscal restraint, the University ". . . [could] not be outstanding in all fields and disciplines; thus part of the commitment to excellence must be a parallel commitment to selectivity. . . "; the University needed ". . . to identify areas of current and potential excellence, and put [its] limited resources into them."

Dr. Davenport went on to note that there was nothing more difficult to acquire than an international reputation for excellence in research, and nothing more fleeting if the infrastructure available to support research was "undermined".

In its May 1989 document *Guidelines for System Development*, the Department of Advanced Education requested an 'Institutional Development Plan' which would include a statement of purpose and mandate. In developing its response, and consistent with the aforementioned statements, the University has focused on the principles which would guide future decision-making:

> *University of Alberta Mission Statement (Draft)*
>
> *The mission of the University of Alberta is to be one of Canada's outstanding universities, to serve our students, the province, and the country by excelling in selected areas of research and teaching. We seek to*

enhance the horizons of learning through the discovery, transmission and preservation of knowledge. We aim to attain academic distinction recognized nationally and internationally, through concentration on both teaching and research, through setting priorities in line with our mission, and through providing opportunities for growth and achievement to our faculty, students, and staff.

The Perception Of The Library System At The University

In years past the University has taken great pride in having the second largest academic library in Canada, and the 29th largest research library in North America. The Library System was often cited as one of the important features of campus life.

Over the past two or three years there has been a perception that ground has been lost, both in terms of services and collections. Proponents of this view found common cause on the Save the Library Committee, active in the first quarter of 1990. This coalition of library staff and faculty members brought attention to various issues through rallies and the media. Though by no means a one-issue group, key to the concerns of the Committee was the cancellation of 15% of the Library System's journal subscriptions as a result of escalating price increases and inadequate budgetary responses.

The following selected comments represent the nature of the concern:

> *. . . It may be that as expressions of committee sentiment, they seem to represent only one of many equally good causes crying out for more money. What is overlooked is that a good library is the very heart of a university, and now that the University of Alberta has embarked upon a development towards an even more strongly research-oriented institution, it is quite evident that official policy demands the treatment of library funding as a first priority, and anything else makes hypocrisy of claims to foster excellence in research.*
>
> *Dr. R. d'Alquen*

> *. . . Without a strong library, the University of Alberta will inevitably sink back to the position of a "provincial" university in the worst and narrowest sense of the word. This threatens the entire thrust of recent university policy which has been to encourage the development of the U of A as a "world class" research facility with a larger graduate student intake . . .*
>
> *Dr. Norman Ingram*

> *. . .'A good book is the precious lifeblood of a master's theory', I'm talking about the books as our blood and the fact that we are bleeding . . . We hope you will make the library a high priority in your budgeting . . .*
>
> *Dr. Juliet McMaster*

It is important to point out that these concerns are not unique to the University of Alberta Library System. All libraries in the province, indeed in the country, are facing the same pressures. The provincial situation was addressed in May 1990 by the Confederation of Alberta Faculty Associations (CAFA). In a brief responding to the aforementioned government policy papers, CAFA noted:

> *One of the hardest hit areas of the university in the last decade has been the library. Despite the best efforts of universities to provide adequate funding, libraries have been forced to decrease significantly the quality and quantity of services and materials they provide to students, to the research community and to research.*
>
> *The technology to effect cost savings within academic libraries is now available.*
>
> *While the primary users of academic libraries are members of the university community, usage is not limited to academic staff and students. The decreasing ability of university libraries to meet the needs of their users therefore has an impact on the larger community.*
>
> *Academic libraries require a special infusion of funds if they are to address the problems they face.*

The Library System's Role In The Local, Regional, National And International Contexts

As a 1982 report of the Social Sciences and Humanities Research Council of Canada pointed out:

> *. . . there is no fall back national research resource for recorded material outside the universities. Thus the university research collections bear an additional burden, and an additional, national, importance not found in other countries. There is also the ever present Canadian geographical extension and space.*
>
> *(Terry Cheney, **Solitudes and Communities: Prospects and Options for Social Sciences and Humanities Research Library Resources in the Eighties.** Ottawa: Planning and Evaluation Directorate, Social Sciences and Humanities Research Council of Canada, 1982, p. 2.)*

Due to its size and scope, the University of Alberta Library has significant responsibilities as part of the "national research resource".

The resources of the University of Alberta Library System support in large measure the academic enterprise of the Province, and contribute to its public library network. 51% of interlibrary loans go to other Alberta libraries. It is a significant contributor to the interlibrary lending network of the prairies, the nation as a whole, and internationally: 20% of loans go to prairie institutions, 28% to other Canadian libraries, and 1% outside the country.

The Library System maintains these cooperative commitments through participation in a number of networks.

- the Alberta Universities InterLibrary Loan Service (AUILLS) was developed in 1979 with a grant from the Alberta Heritage Savings Trust Fund (AHSTF).

- the Alberta Provincial Government Libraries Interlibrary Loan Service (APGL), also begun in 1979, provides access for government libraries to the University's collection. This service is coordinated by the Legislature Library.

- the Public Libraries InterLibrary Loan Service (PULLS) was initiated in 1987 with the closure of the Extension Library at the University. The extension function was taken on by the regional public libraries, with the University agreeing to serve as library of last resort. Until recent cutbacks, the Alberta Department of Culture and Multiculturalism has provided an annual grant in support of this service. This arrangement is under review.

Within the western region, the Council of Prairie and Pacific University Libraries (COPPUL) works to enhance services to its constituents. Recent initiatives include: reciprocal borrowing privileges; enhanced interlibrary lending services; regional journal collections; cost sharing of special acquisitions, etc. The group is presently considering further initiatives which would elevate their resource sharing activities to higher levels.

The pressures for increased provincial cooperation are becoming more intense. The economic downturn has forced some businesses and government departments to close their libraries, sending their former clientele to the University. These users see the Library System as a provincial resource, funded by public resources and thus available to the public.

Finally, at the national level, the Library System is a member of the Canadian Association of Research Libraries (CARL), participating in such programs as are initiated from time to time. It provides bibliographic access to its collection through UTLAS Inc., the national bibliographic utility. It is also a member of the Association of Research Libraries (ARL).

II. SCANNING THE TECHNOLOGICAL ENVIRONMENT
THE IMPACT ON RESEARCH AND TEACHING

. . . computers are changing our understanding of the world, how we pursue research, the nature of research libraries. Institutions of higher education, which are not known for their ability to respond quickly to change, must now think about organizing knowledge in new ways. . .

(James Zumberge, "Education, Technology and the Pacific Century", EDUCOM Review, Winter, 1987, p.18.)

Information technologies -- the convergence of computing and telecommunications -- are redrawing the horizons of research. As the basis for new families of instruments for data collection and analysis, as vehicles for information storage and retrieval, as writing tools and electronic links to extend the process of collaboration, it is clear that these technologies are fundamentally changing the scholarly communication process. Responding to pressures of financial constraint and efficient resource management, universities are embracing the possibilities of computing and information technologies to increase research productivity, and to enhance the quality of the learning environment.

The changes brought about by information technologies go beyond the mechanics of productivity. They form the basis of a knowledge revolution with political, social and economic consequences that are redefining the university's role in society. As advanced technologies have shifted the balance of global economic power, universities are being called upon to participate more directly in the national economy through more aggressive technology transfer, and to develop new curricula which will produce graduates competitive in an information and technology-intensive economy.

Most important, universities are beginning to recognize the need to move further into the public arena to take an active role in the development of national information policy, and the building of an information infrastructure for the next century.

The Information Environment

If the university is an axis of the information society, one might expect it to be a center for advanced applications of information technology. Certainly

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no sector of society is more acutely aware of the information crisis than the academic community, which itself plays a significant role in fueling it.

The extent of the informational tidal wave is difficult to exaggerate. The information base in some fields is now doubling every 12-18 months. Over 1,000 books are published in the world daily -- 25% of them in developing countries where the rate of publication is increasing ten times faster than in the West. Despite the trends to electronic formats, there are twice as many print journals published today (108,000) than in 1970. Somewhere in the world, a scientific article is produced every two minutes.

This escalation in volume is matched by increases in the cost of information, with inflationary forces not limited to the esoteric scientific literature, contrary to the popular belief. Canadian census files priced at $35 in 1982 cost $2,500 in 1986; satellite images that were previously free now carry a price tag of $5,000 each. While the information community concerns itself with intellectual censorship, the spectre of economic and technological censorship is far more dangerous to the future of the research enterprise.

Rejection rates in the journal literature range from 41% in the sciences to 88% in the humanities, resulting in the proliferation of alternative distribution channels. Increasingly, as the world witnessed in 1989 with new discoveries in superconductivity, research moves too quickly for print literature. Society has yet to come to grips with the challenge of preserving that increasing portion of the intellectual audit trail that lives briefly on electronic conference networks, and never finds its way into formal print.

On-line information services, and distribution of massive data collections on compact disk are revolutionizing the publication and dissemination of information. The National Technical Information Service (NTIS) projected a 70% decrease in paper/microform publication from 1980 to 1990 by moving to online and optical disk formats. The U.S. federal government projects an eight-fold increase in publication on CD ROM in the next three years.

In 1989 over 25 million searches of databases were executed in the United States, compared to one million searches in 1975, and end-user gateways to these databases grow by 300% each year. Princeton University estimates that even among conservative libraries, the ratio of print to electronic information will shift from 85/15 to 60/40 within the decade.

These technologies are not simply supplanting conventional print media. New data-intensive research programs and analysis techniques generate masses of information never before possible, most of which could never be managed in print. The United State's earth sciences databases currently contain 100,000 gigabytes of data (1 GB=225,000 typed pages). This is projected to grow to 10 *billion* GB by 2005. The NASA earth observing station will generate more data each month than has been produced by all LANDSAT satellites in the last ten years.

These trends are not unique to the sciences. The ability to search and perform machine analysis on digital versions of the Oxford English Dictionary, classical Greek texts or the plays of Shakespeare, or digitized images of Renaissance paintings, is already showing how new research techniques will rewrite the information universe of the humanities as it has in the sciences.

In this new information environment, there will be no centralized information agencies; but, universities and their libraries will become critical nodes in a system whose complexity will require entirely new approaches to information management.

The Problem Here And Now: Information Dysfunction And Economic Crisis

With the decline of North American competitiveness in the world economy, the ramifications of this information explosion have taken on new urgency. One factor in Japan's success is its attention to and exploitation of the available research base, and its intention to invest massively in an infrastructure to build on that strength.

In the West, the private and public sectors are beginning to recognize that competitive advantage is not simply a question of levels of funding for research and development. The United States government is already the largest single source of scientific and technological information in the world, with expenditures of over $65 billion annually in research and development -- 50% of total United States investment. The problem is how it *manages* the research base it generates.

In 1989, the Congressional Office of Technology Assessment (OTA) was asked to look at the challenges to be faced in improving that nation's competitive performance, in building its technological base, in strengthening education and improving global cooperation. The OTA identified the key problem as the absence of a national policy and strategy for the management of scientific and technical information (STI) in a way that can realize the potential of this massive research investment. As the life cycle of STI gets shorter, the impact of this failure becomes more acute.

In Canada, the implications of this failure are even more serious. Its poor spending record in research -- 1.3% of GDP -- when compared with Sweden, Japan or Germany is a familiar refrain. Increasingly however, the focus is shifting to Canada's ability to make better use of a global research base.

> *At best, Canada is going to do 2% of the world's research, which means that 98% of the technology we need is outside Canada. So you better commercialize the world's technology. If you only commercialize what you've got, you've only got 2% of the world's technology and you're going to get beaten for sure.*
>
> *(John Roth, quoted in "How Canadians Can Compete," by Daniel Stoffman,* ***Report on Business Magazine****, July 1990, p. 47.)*

Some commentators suggest that the systematic scanning of best practices and new knowledge, their efficient translation into commercially exploitable innovation, and their rapid diffusion throughout the Canadian economy are much more potent means than national research and development targets in meeting the challenges of global competition. (Pierre Lortie, *Globe and Mail*, April 23 1990.)

The Alberta government is actively promoting this concept in its "Science City" program. According to the Department of Technology, Research and Telecommunications, this virtual city represents the 200,000 Albertans whose jobs are based on an economic diversification strategy of which the cornerstone is the development of advanced technologies.

The essential components of Science City are a highly educated workforce – the prime resource of knowledge-based industries – and the infrastructure to attract these industries. This includes research institutes, universities and the network base that serves as the "efficient subway system in Science City".

As more information is created, distributed and stored electronically, electronic communication networks become an essential vehicle for transferring that information. This aspect of the research infrastructure, arguably performed best by the Province's research libraries, will give Alberta's innovative small companies the research capability usually enjoyed by large corporations. According to some analysts, the Province's aggressive commitment to this infrastructure, not spending on energy megaprojects, will be the key to the province's long term growth. [Suzanne Zwarun, "Seeds of Renewal," *Canadian Business* (June 1990)].

Networks And The Information Infrastructure

For Fraser Mustard, President of the Canadian Institute for Advanced Research, Canada's problem is clear; the country lacks the infrastructure to exploit knowledge successfully or to understand adequately the needs of knowledge-intensive industries. (*Financial Times*, August 30, 1990).

If universities are to fulfil their role as axial structures in a technology-intensive economy, they must play a central role in the development of information policy and in the management of the information resources generated through advanced technologies in research and development. At the heart of this challenge is the development of continental and global network infrastructures.

The Current Situation

In the past decade, the thousands of academic and private research networks which have developed in North American universities, corporations and government have pursued an intricate ad hoc strategy of interconnection. The University of Alberta is tied into two of these linkages, the Corporation for Research and Educational Networking (CREN) and more recently the INTERNET.

CREN (Corporation for Research and Educational Networking)

Known previously as BITNET, (the 'Because It's Time Network') CREN is widely used by universities for electronic mail, conferencing and file transfer services among 3,000 sites in 33 countries. It has developed linkages to the European Academic Research Network (EARN). Its relatively slow speed does not permit interactive functions -- users can query remote databases through servers that respond with results by electronic mail. Because of these limitations, its functions over the course of the next few years will be absorbed into the INTERNET.

The INTERNET

Established in 1983, the INTERNET is a linkage of over 2,000 local, regional and national research networks with more than 130,000 sites and one million users throughout North America and around the world. With its higher speed and capacity, it supports not only electronic mail and file transfer, but real-time, computer-to-computer interaction, including direct searching of bibliographical databases.

The INTERNET runs on the high-speed backbone of the National Science Foundation's NSFNET. Its users include universities, government and the military, and advanced technology industries. Originally conceived to provide distributed access to supercomputing resources, non-profit organizations serving the research community are its fastest growing user group. For example, the availability of dozens of research library catalogues has shifted attention from the relatively narrow supercomputing sector to the potential of the INTERNET as a vehicle for broad-based access to international information resources.

> *... the concept of a national network must apply not only to electronic mail and access to advanced scientific resources, but to access to information resources such as library information systems, databases, information services and electronic publishing ...*
>
> *(Clifford Lynch, "The Growth of Computer Networks: a Status Report". **Bulletin of the American Society for Information Science**, June/July, 1990, p. 11.)*

Rapid growth in the use of these networks has resulted in a critical need to increase their capacity. The number of sites on the NSFNET has tripled in the past year and traffic on the system has grown by 500% resulting, for the short term at least, in deterioration of network performance.

With funding in place to significantly upgrade the trunk capacity of the INTERNET in 1990, there remains an urgent need for directory services both of users and resources available on the networks, which the existing network structure is not able to support. While new bridges between networks are being set in place constantly, the task of even connecting their various mail systems, and of building user interfaces for these connections is a massive challenge that can no longer rely on grass-roots cooperation among institutions and research associations alone. The next phase will require a major coordinated initiative by both levels of government, private industry and the universities.

The Next Stage: The Emerging National Computer Superhighway

In the United States, advances in national networking are accelerating dramatically, now that the strategic importance of this information infrastructure is being forcefully linked to the challenges of industrial leadership and national security.

The 'High Performance Computing Program' has become a major topic on the national public policy and legislative agenda in the United States. This has taken the form of a series of reports from the United States Congressional Office of Technology Assessment, the White House Office of Science and Technology, the National Research Council; and S.1067, a bill sponsored by Senator Albert Gore to fund the construction of a national information infrastructure. The latter has now been incorporated into S. 402 of the American Technology Pre-eminence Act, passed by the House of Representatives in July 1990.

The National Research and Education Network (NREN)

A proposed National Research and Education Network (NREN) is a central element of the High Performance Computing Program. The NREN would be built on the existing national and regional networks to form North America's largest public computer network. In its first phase NREN calls for the connection of 1,400 campuses within five years.

> *. . . Researchers, scholars and educators from institutions of every size will gain uniform access to current and evolving national information technology resources, such as national databases, medical imaging, satellite data, and supercomputer centers . . .*
>
> *(Advanced Network Services, Inc., "Merit, IBM, and MCI form new organization to expand National Computer Superhighway". Press Release, September 17, 1990)*

Support for the network initiative is coalescing rapidly. In May, 1990 EDUCOM, CAUSE and the Association of Research Libraries announced the formation of the Coalition for Networked Information, now numbering over 70 universities, government and corporate members, to promote the development of information resources on the network and thus ensure that libraries play a major role in the enrichment of teaching and research.

In September 1990 IBM, MCI and Merit, Inc. announced the establishment of Advanced Network and Services Inc., a non-profit corporation to manage the expanding NSFNET, and provide a spectrum of networking services to universities, research establishments and the private sector. This agency will work to expand the base of financial support for the concepts of the NREN by broadening its user community in the private sector and finding the financial resources to assist less affluent organizations in connecting. It will promote research into ultra high speed network technologies, and work closely with universities and mid-level networks to help them meet new service challenges.

With research to commence in 1991, testing by 1993 and implementation by 1996, the NREN would ultimately function at speeds of 3 billion bits/second -- 2,000 times current capacity. The initial United States federal investment would be $400 million over 5 years, though this represents only a fraction of what would be required at the state/provincial level, at the institutional level for the development of campus networks, and from the private sector for advanced network research and product development. By way of comparison however, Japan is committed to spending $240 *billion* on network technologies by the year 2000.

The stakes are high; the challenge of building an information infrastructure will be a dominant capital initiative of the 1990s. Its importance, its economic, political and social impact has been likened to the building of the continental railway systems in the 19th century, and the national highway system in the 1950's.

The Canadian Situation

Canadian universities have been connected into the CREN and thus to colleagues around the world for several years through the Canadian NETNORTH.

In recent months, Canada has begun to build the base for higher speed inter-network communications. With government sponsorship, a number of provincial research councils and universities have established provincial research networks which in turn will form the backbone of the emerging Canadian Network or CA*net.

The University Of Alberta has been connected to the INTERNET since January 1990 via its provincial link, the Alberta Research Network or ARnet. Although its backbone speeds are still extremely slow by United States standards, this initiative gives greater numbers of Canadian researchers a platform for linkage to the emerging high speed research network.

Canada's rate of network development is closely linked to the future of telecommunications rate regulation, and the resulting pace of installation of high speed optical fibre cabling across the nation. At present, the major users of high speed data transmission continue to be the private sector; Canada's banking industry is the single largest consumer of optical data transmission capacity. Regrettably, Canada's data transmission rates are up to eight times those in the United States. While recent proposals from Bell Canada to the Canadian Radio and Telecommunications Commission (CRTC) could cut these rates by up to 40%, massive hardware investment is necessary at the provincial and national levels to support the extension of this network infrastructure to serve the research community more effectively.

Universities, Computing And The Information Infrastructure

> *University campuses are recognizing the urgency to develop a comprehensive plan to integrate personal computing, information services and the use of instructional technology in the academic enterprise.*
>
> *(Ernest L. Boyer, College: the Undergraduate Experience in America. New York: Harper & Row, 1987. p. 172.)*

The challenge for universities is to provide the computing infrastructure to support this revolution in scholarly communication: the problem is both complex and costly.

For those universities which have taken a leading role in information technology, the investment has required a decisive reallocation of resources. For example, the University of Southern California has directed a $357 million funding campaign over the next decade to build an advanced technology infrastructure. For Brown University, a commitment to workstations for faculty and students will require $70 million over ten years. At the Massachusetts Institute of Technology, $50 million has been earmarked for network development.

The impediments are not simply financial. Technological hurdles include the controversial process of setting and adopting standards for network communications and information systems. There are institutional issues of confidentiality, security, intellectual property, and an organizational adjustment to values of cooperative networking. There are behavioral impediments at the user level in the adoption of new techniques of research and teaching – openness to change, willingness to invest time in training, and receptiveness to a new relationship of interdependence with technology.

In the view of the National Panel on Information Technology and Research, the most fundamental of the institutional and behavioral impediments to the adoption of these technologies in universities is the absence of a campus infrastructure to support their use. This includes access to experts, tools for developing software and integrating it into curriculum programs, widely supported faculty programs to foster the use of new communication methods including electronic conferencing, and particularly the existence of centres on campus to store and share this information – centres which draw together the skills of librarians, computer experts, and new classifications of knowledge engineers whose expertise is research and instructional technologies.

Coping At The User End: Information Technology And The Researcher

> *The information age is no longer adequate as an image for the present, let alone as a guide to the future. It still focuses on hardware technologies, mass production, narrow economic models of efficiency, and competition, and is more an extension of industrial ideas and methods than a new stage in human development . . . Focusing on more information has led to overload of ever-less-meaningful billions of bits of fragmented raw data, rather than the search for meaningful new patterns of knowledge.*
>
> (Hazel Henderson, "*The Age of Light: beyond the Information Age*", quoted in Richard S. Wurman, *Information Anxiety*. New York: Doubleday, 1989, p. 42.)

While universities concentrate on the application of new technologies to increase research productivity, the more formidable challenge is in harnessing that technology to manage the results. Some researchers now claim that it takes less time to do an experiment than to do the research to find out whether or not it has been done before.

Affordable computing speed and memory, new massive optical storage media and communications capabilities have placed at least the technological requirements of the scholar's workstation within the grasp of the researcher. To this point, there has been only guarded interest in the possibilities of this technology for information retrieval. Lack of information is not a problem for most scholars; buffering the tidal wave of information is.

To date, the personal computer has not offered much promise in this area. It is too often a tool in search of an application, demanding an operator who, having dedicated time and energy to learning its use, must watch over it. Accompanying new research capabilities are endemic frustration and dissatisfaction with uneven access to computing, software designed for computers rather than people, mysteries of file formats and arcane network protocols, and inadequate technical support from the institution.

The tools of information technology must begin to move away from indiscriminate access -- opening the information floodgates -- to intelligently assisted selectivity. A revolution in the relation between the user and the computer is required which takes the user beyond the hardware and software to focus on the resources themselves, and which permits the creation of that intelligent buffer.

It is the increasing power of the personal computer which is leading to that redefinition from the computer as tool to the computer as intelligent agent. More intuitive graphical user interfaces are designed not simply to mask the mechanics but to utilize the mind's facility with perceptual cues, leaving it free to focus cognitive skills on the information itself. Object-oriented programming, which uses image manipulation as a new linguistic metaphor for programming, will gradually be introduced into the repertoire of the user. Embedded expert systems will have the ability to track their user's work habits, patterns of information selection etc. and build a particularized work environment.

At that point, computer operating environments can become learning environments. The ability of a computer to watch for and repeat search routines and patterns of selection based on the personal research interests would permit personal computers to sign automatically onto information systems, check new information in defined fields, evaluate its usefulness through citation analysis, integrate the results into the scholar's ongoing research notes, bibliographies, etc.

These activities will not replace existing processes of scholarly communication – i.e. collaboration with those who share specialized interests, conferences, circulation of preprints, etc. They will provide new techniques, however, to deal with the universe of formal and semi-formal information that used to be the preserve of scholarly journals and monographs, and which is beginning to merge with a complex array of electronic information alternatives.

Personal Computing And Instructional Technology

Instructional technology is in a similar process of redefinition. From its origins in audiovisual media, it is growing rapidly to encompass instructional design, media services and new directions in computer-aided learning.

With the emergence of new strains of information technology – interactive video, multimedia computing that integrates digitized image and sound processing, expert systems, hypermedia and simulation environments – new directions in teaching are possible that go beyond canned AV and electronic slide shows or keyboard multiple choice exercises currently billed as computer assisted instruction.

Instructor training in new teaching methods is required, as is technology support, classrooms, and study facilities that support computing and media. New organizational alliances are also necessary.

> *. . . many faculty are willing, indeed eager to adopt technological aids. But the human support services and the financial commitment this implies are crucial. It won't happen by itself.*
>
> *(Report from Harvard University, Explorations with Students and Faculty about Teaching, Learning, and Student Life, quoted in Joan S. Mitchell, "The Changing Face of Instructional Technology Centers". Bulletin of the American Society for Information Science, Aug/Sept. 1990, p. 7.)*

This convergence of computing and educational media has only begun to be recognized organizationally. At Carnegie-Mellon University, the two units have been recently consolidated into a single department - Academic Computing and Instructional Technology.

Informally, faculty are seen as the powerful partner in this initiative because they drive the needs of students as end-users, and themselves represent the focus of training and support. However, the research library is recognized as an equally vital ally in this structure. Its role in housing and organizing media and support materials, in providing access to information resources beyond its walls, and in functioning as a laboratory for teaching and promoting the use of computers for information seeking and management, are integral to technology-intensive learning environments.

Computing Issues At The University Of Alberta

University Computing Systems (UCS), like the Library System, has borne the direct impact of these massive changes in technology. The availability of reasonably priced microcomputers and workstations has made mainframe time-sharing less relevant to the needs of students, researchers and instructors, and vastly increased campus expectations for computing support from a new base of non-technical users.

Personal Computing

The complexity of providing support for the diversity of hardware systems, software packages and telecommunication configurations is already overwhelming and will continue to grow as new environments like UNIX become more popular at the workstation level. As UCS has recognized, distributed, seamless environments with graphical interfaces and a peer-to-peer network emphasis are required to serve tomorrow's computer user. (University Computing Systems, *Report to the President's Advisory Committee on Campus Reviews.* June, 1990, p.8.)

New Mainframe Directions: Network Management

However, while mainframe time-sharing decreases, the expectations of existing mainframe users continue to rise, and the role of the mainframe in managing network communications becomes more significant. Numerically intensive computing has grown an average 49% annually since 1982. The rapid increase in the number of faculty using microcomputers (expected to grow from its current 50% to almost 100% in the next few years) requires development of the campus network backbone, and will result in increased demand for electronic mail which presently exceeds 60,000 messages per month, for conferencing and file transfer systems. Finally, demand for better access to supercomputing must be met if the University is to draw and retain researchers in high technology research fields.

These pressures could not come at a worse time for the University. Catastrophic reductions in capital funding have undermined the ability of UCS to respond to the demands of a networked campus.

In an article in the *Edmonton Journal*, University President Dr. Davenport lamented the absence on campus of a high speed computer network, which he considered as "essential information technology of a modern research university":

> *In the 1970's and the early 1980's, the University of Alberta was a leader in the use of computer technology for teaching and research. We were pioneers in computer assisted instruction, the use of microcomputers, in computer assisted registration and electronic mail. Today, our microcomputer labs are sadly out of date and insufficient to meet student demand; we have no integrated high speed computer*

> ***network, considered by many as essential information technology of a modern research university; our central mainframe computers are approaching ten years of age and are increasingly an embarrassment as we try to recruit scholars with significant computational needs.***
>
> *(Paul Davenport "Is the University of Alberta Rich?", Edmonton Journal, April 29, 1990.)*

The President's strong views on the importance and centrality of the University's information infrastructure in supporting the academic enterprise is embodied within his recent reorganization of the senior administration. With the new office of the Vice-President (Student and Academic Services), the University should be able to build upon the strengths of its Library System and its Computing Centre, to create a scholarly information environment linking these units in a common mission; that is, the delivery of knowledge and information resources, both local and distant, to the academic community through sophisticated electronic technology.

The critical problems which must be addressed in order to put the University's computing infrastructure on course are clearly recognized by University Computing Systems. Indeed, in their own PACCR study they note that the ". . . University does not have a comprehensive vision or strategy for computing. In the absence of an articulated and approved strategy, the direction will be ad hoc." (University Computing Systems, *Report to the President's Advisory Committee on Campus Reviews*. June, 1990, p.8.)

Key elements of any strategy, have, however, been identified:

- a new network strategy must be implemented to replace the superseded Hyperbus technology. The current system is both complicated to use and limited in capability. For example, while researchers on this campus can freely tie into the networks of many other campuses through the recently installed INTERNET connection, the University of Alberta is unable to reciprocate that access to researchers elsewhere. A network structure must be designed which adheres to emerging standards, and provides a consistent, seamless and easy-to-use interface to a wide range of resources available on the network;

- the University's aging mainframe platforms must be replaced to solve problems of obsolescence, mounting maintenance costs, and over-capacity. For example administrative applications are hopelessly backlogged while usage grows almost 20% annually. Use of the Library catalogue, the largest consumer of campus computing cycles, has been growing up to 35% annually, yet the Library System is unable to extend dial-up access even to its own students, let alone other institutions;

- a new charging structure is required which reflects the realities of distributed computing. The current cost of computing cycles discourages the use of computing; prohibitive connection costs impede the progress of campus networking; both are antithetical to the emerging information environment;
- responsibility for microcomputer sales and support among UCS, Technical Services, the Microstore and Materials Management must be clearly defined, policies rationalized and services improved. At present only 50% of faculty use microcomputers in some way. University-sponsored programs to encourage the personal purchase of microcomputers must be improvided (deep discounting arrangements to units and individuals); educational software and site licensing of software needs to be expanded beyond the present small handful of packages;
- access to computer-equipped teaching facilities and public computing labs must be upgraded. At present there are 405 microcomputers in 16 campus microcomputing labs to serve the computer needs of the curriculum as well as public access. This amounts to less than one PC for every 60 students; many of these labs are in serious need of equipment upgrading to handle current popular software;
- an electronic mail strategy must be defined to consolidate the three competing systems on campus.

The solutions to these issues are both financial and organizational. The cost is estimated by UCS at $15-20 million, plus $1-2 million per year for maintenance and replacement. In the last two years, central capital funding for computing was only a little more than $1 million.

Equally important, a new organizational structure must be defined to complete the consolidation of administrative and academic computing. This structure must however expand its perspective to recognize critical alliances on campus with the converging interests of the Library System and instructional technology, and to provide for more effective informal partnerships with its major client groups - faculty and students.

> *Scholarly information is too big a topic for universities to ignore. Moreover it has so many ramifications that leaving its planning to the library, or worse still to the computing center, is unlikely to provide a good balance. The only sensible solution is a coordinated plan in which many parts of the university work toward a common*

goal of providing faculty and students with the information they need for study and research."

*(William Arms, "Scholarly Information", **EDUCOM Bulletin**, Fall/winter, 1983 p. 23.)*

III. MISSION STATEMENT

Context

The Library System has traditionally supported the University's mission of discovering, transmitting and preserving knowledge by providing access to information by such means as: building, organizing, managing, housing and preserving collections; providing reference services; and employing appropriate technologies for finding information.

Changes in the scholarly information environment, fueled by new technologies and by the expectations of an information-based society are transforming research and teaching methods. In response, the System must redefine its methods in ensuring an appropriate, high-quality learning environment.

The Library System's direction will reflect the University's commitment to leadership within the community of academic institutions, to selective excellence in research, teaching and study (recognizing that it cannot be outstanding in all fields), to educating students for a full lifetime of work and cultural interaction, and to community service by supporting the social and economic fabric of the province and nation.

The Library System is an essential element of a University which uses as one measure of its success its ability to attract the highest calibre of faculty member and student. Universities which utilize new information technologies, in conjunction with the traditional array of library collections and services, to enhance teaching and research opportunities will have a recruiting advantage in an increasingly competitive academic marketplace.

The success of the University is measured also in the calibre of its graduates. Those from universities which have integrated into their curricula the information and technical skills needed to access information and knowledge will have a decided advantage in an information society.

Mission

From independent ownership to interdependent access

The mission of the Library System is to place itself among the ranks of those progressive research libraries in North America which, by accepting that institutional self-sufficiency is not possible, are redefining their strength not solely by the resources they own, but increasingly by their ability to share these resources and provide effective access at the margin to information resources beyond their walls.

In so doing, the Library System must assume a new role. In partnership with others on campus, such as University Computing Systems, it will build an integrated campus information network which will support the information requirements of the university community. It will forge external linkages to the regional, national and international research information network for the purpose of effortless access to information coupled with timely document delivery.

Evolution and balance

This scholarly information system must preserve, more fully exploit and build upon traditional collection resources, and at the same time embrace the opportunities of new technologies to respond more effectively to the changing needs of the academic enterprise.

In the evolution of information services, the Library System constantly reassesses the allocation of resources to ensure equity and balance of service among its components, whose constituents have differing information needs, at differing times, with differing technological imperatives.

Quality through rationalization of resources

The Library System reflects the University's commitment to selective excellence by identifying and focusing its resources on the development of collections of strength in keeping with the institution's academic planning.

Outreach: leadership and new alliances

The Library System will exploit its strengths through bold initiatives in seeking strategic alliances and network solutions (provincially, nationally and internationally) with other libraries having complementary collections of strength. It will work to continue to develop cooperative agreements founded on contractual bonds of reciprocity.

Through these alliances collections, services and people can be shared among other educational institutions, industry and government in order to achieve not only institutional objectives but the broader objectives of accessibility, decentralization and rationalization in post-secondary education, as well as economic diversification and technology transfer.

Information literacy: the teaching role.

The Library System will assume a more active role in the University's commitment to learning by pursuing partnerships with those involved in curriculum planning, development and instruction to integrate information literacy skills into research and teaching programs.

Human resources

The Library System accepts that it can only fulfill these responsibilities through the nurturing and development of a staff: knowledgeable in the research methods of the disciplines they serve; skilled in matters of information management, collections, instruction, and information technology; innovative in their approach to service development and problem solving; passionate in their striving for effective performance and service; and committed to expanding their professional contacts beyond the University proper.

Unity of purpose

In the pursuit of these ends, all library resources -- personnel, collections, products, services, and facilities -- constitute a single, integrated system. Exercising leadership and vision, and drawing upon the resources of the whole while at the same time cognizant of budgetary restraint, the respective component libraries support the University of Alberta's academic goals in a manner which is both balanced and differentiated, thus best serving the diverse needs of constituents.

IV. VISION FOR THE FUTURE: THE NETWORKED LIBRARY

AN ACCESS/RESOURCE SHARING MODEL

The society around us is changing in some very fundamental ways. These changes have the potential to alter significantly the way research libraries serve their communities. In fact, libraries are at a crossroads -- some say that libraries ARE a crossroads.

The Library System's ability to provide access to a substantial portion of available knowledge has been eroded by the sheer proliferation of scholarly material and spiralling costs. At the same time, technological developments, especially the rapid evolution of telecommunication infrastructures, are presenting extraordinary opportunities. The challenge to the library must be in safeguarding important traditional roles while making the best use of these new opportunities.

Seeking a New Paradigm

For research libraries there are two diverging paths, only one of which leads to the future.

In following the first path, attempting to maintain the status quo, the library strives to provide traditional physical and bibliographic access to published knowledge. However, this centuries-old paradigm of the campus library as on-site, self-sufficient repository of most resource materials breaks down as libraries confront the combined realities of cumulative and ongoing double-digit inflation for resource materials; the information explosion; and the proliferation of electronic publications.

Without massive and ongoing infusions of new funds, the library becomes incapable of meeting the evolving needs of instruction and research. And in the absence of adequate funding, the library becomes an archive of the past, largely irrelevant to scholarly research requiring current materials.

Universities cannot pretend that minor funding increases, operational streamlining through automation, or repeated collection rationalization and cancellation projects provide solutions to the structural problems of their libraries. An attempt to cling to the unrealizable goal of self-sufficiency will not only result in the stagnation of existing collections, but will cripple attempts to meet the challenges of the electronic information environment.

It has become clear that a re-thinking of how libraries achieve major goals is essential, because the old systems are no longer effective.

> *The basic problem is that the research community, and much of the rest of the society, is moving beyond the capacity of the research library. It is time to shift from the main emphasis on acquisition to an emphasis on access.*
>
> *(Frank Newman, cited in Patricia Breivik and E. Gordon Gee,* ***Information Literacy: Revolution in the Library****. New York: Macmillan Publishing Company, 1989, p. 139.)*

The new paradigm would see the library acquiring material to support the undergraduate curriculum, research at a basic level, and designated collections of strength. It would not however pretend to support all advanced research from its own collections. Institutional ownership and self-sufficiency at this margin will be replaced by inter-institutional cooperation and resource sharing.

The Cooperative Model

Cooperative collection development agreements, based on reciprocity, will underpin access to other collections which have identified complementary collections of strength. The strategy will be to achieve comprehensive access to knowledge, rather than comprehensiveness of collections.

The concept is not new. Libraries have been paying lip service to resource sharing for decades. Interlibrary lending has always played a minor but essential role in supplementing local collections. But, until recently cooperation through networks was seen as a distraction, taking attention away from a library's primary responsibilities to its own faculty and students. Today attention to cooperation is essential if a library is to provide to that primary clientele access to a vastly larger store of scholarly materials.

The enabling factors would be the assurance of resource sharing access, coupled with timely document delivery, from contractual partners. The challenge of the day is to find a means to establish effective and efficient collaboration without destroying -- or threatening to destroy -- an institution's capacity, and responsibility, to support its programmes to an agreed upon level. What kinds of restraints upon institutional autonomy are tolerable and under what circumstances?

The Resolve

The external environment at present, and that anticipated in the 1990s, is not that of the ebullient and expansive late 1960s or 1970s. Fortunately, the timely confluence of four major factors – need, technology, leadership and will – enables today's research libraries to meet the challenges in a systematic and responsible way. Need is obvious, since the clear view to the long range is austerity. Reliable, affordable technology – not previously available – is a vital enabling factor. Finally, a new generation of leadership is demonstrating the will to respond actively and creatively.

Today's leadership has the option of invoking new and different approaches. Most particularly, template networking mechanisms can be invoked, which will facilitate the collective capacity to serve academic clienteles. The shift from the informal collaboration of the past to the systematic, formal networked solutions of the future is the natural evolution that forms the basis of the access/resource sharing model.

It is a commonplace that institutions willingly forego some autonomy if a collaborative arrangement provides a benefit, especially a benefit not available by acting alone. They depend upon an 'exchange theory' that balances diminution of autonomy by significant advantage gained. Mutual benefit must be derived. It is to be expected that such relationships will be characterized by strong commitment to problem-solving and cooperation. Each participant is granted the right to make demands upon the other(s) and some kind of reciprocity is assumed. Each institution remains accountable to its primary clientele and its own authorizing body.

Networking does not relieve an institution of its primary institutional responsibility to maintain its local resources. Cooperation is a necessity but not a panacea. Properly conceived and properly administered, cooperation provides each partner with the capacity to support local programmes optimally while knowing that a modest incremental investment will enable confident reliance upon others for material beyond mainstream programs.

The Transformation

The paradigm shift will not be abrupt. Change will be gradual and evolutionary, with movement occurring as technological, political and financial circumstances permit. Further, for some disciplines the access/ resource sharing model will have to be adapted to take into account idiosyncratic and unique methods of research, as well as the structure of the discipline -- reliance on resource sharing will vary by program. Libraries recognize that the scholar's ideal is to have 'everything' in the library. When this is not possible, technological surrogates must be put into place, to paraphrase Stanley Katz. (President of the American Council of Learned Societies, speaking to a meeting on technology and the future of scholarly exchange sponsored by the Association of Research Libraries in Providence, Rhode Island, May 10-12, 1989.)

But in all of this, the vision of the future is made possible by the wisdom of our collective pasts. It is libraries' long tradition of building collections of strength which allows them now to move into the new phase. It gives them the means to reverse the decline in their ability to support teaching and research by capitalizing on the opportunities presented by rapidly changing technology, but at the same time maintain an inter-institutional commitment to their collections, developed with such care and dedication.

The Virtual Library

Recent developments have set the stage for each library to have access to the holdings of other libraries in a network of complementary research collections which, in their aggregate, comprise a "virtual" library, or library without walls. The virtual library is much more than the sum of its constituent parts, as some of its components have extraordinary implications for the way research libraries operate.

Four technological trends are converging which open to research libraries the opportunity -- some would say necessity -- to redefine their role in the scholarly communication process. Because these trends build on the fruits of that massive investment in library collections, and twenty years of library cooperative processing and internal automation, the impact might be pre-emptive and dramatic.

These four key technologies which have brought the concept of the research library network into focus:

1. Online public access library catalogues (OPAC's), originally introduced to replace cumbersome card and fiche catalogues, share a standard data format in most academic libraries.

2. Distributed computing, through the proliferation of powerful personal computers, increasingly linked together and to mainframe backbones through local and wide area networks now provide access to libraries from locations convenient to the client.

3. High speed, inexpensive fibre-optic data communication networks allow for interconnecting of high speed academic computing networks across North America, Europe and Asia. Originally conceived by universities as a means to share access to supercomputer facilities for numerical intensive computing, these research networks allow transparent linkages between institutions and facilitate access to institutional catalogues, including the possibility of full-text document delivery from external databases.

   To put some dimension to the potential, the OCLC database (On-Line Computer Library Center) contains 300 million records from 8,000 member libraries in 26 countries.

4. Document delivery technology is developing powerful telefacsimile machines allowing near instantaneous transmission of documents. Questions of timeliness and standards are being quickly resolved.

In *A Statement From the Research Library Committee*, a group of senior university administrators and scholars brought together under the auspices of the American Council of Learned Societies, the Association of American Universities, the Council on Library Resources, and the Social Science Research Council, noted:

> *While a far-distant future may hold the prospect that some combination of perfectly integrated technologies will make all information personally accessible (the ultimate form of academic independence), the reality is that all of the forces at work – e.g., the rapidly growing quantity of information sources, the increasing complexity of demand, the volatility of technology, and the obvious presence of escalating costs inherent in any dynamic setting – make it essential that there be an aggressive commitment to effective collaboration. Improving the capacity to shape and use cooperative enterprises deserves full administrative attention. Here, perhaps more than in any other university effort, innovation in organization, appropriate financing, and assessment of performance is required.*
>
> *(A Statement from the Research Library Committee. Washington: Council on Library Resources, May 1990. unpaged.)*

Characteristics Of The Revitalized Research Library; a summary

Assumptions about the future must always be speculative. But, in this era of rapidly changing technology, certain directions appear clear. In order to fulfill its responsibilities to the academy, the broader community, and the scholarly world, the research library must re-orient itself in a major way.

Following are some of the characteristics which must be present in order to ensure survival.

1. Demand-driven systems.

The successful academic library is demand-driven, not supply-oriented. It begins with the specific scholarly/information needs of its clients, not the speculative acquisition and warehousing of a broad range of resources. Past library use studies indicate that a significant percentage of material acquired in research libraries is seldom if ever used. The needs of the scholar will differ by discipline and within disciplines; the library must be attuned to these differences, and will ensure a balance in collections and access which parallels the research and instruction carried out by the academic programs.

The model library for the 21st century requires the provision of access to the bibliographic records of the local collection, in the first instance, and rapid connections to other research libraries and external databases. It also requires assured and timely physical access to the materials located. Interlibrary loan services will be greatly enhanced, embracing document delivery through methods ranging from improved courier services to FAX and electronic file transfer.

2. Building on strength: the expanding margin.

The access model does not envisage a decrease in the importance of local collections or the funds necessary to support them. It does, in fact, require more attention to the rationalization and shaping of these collections.

Traditionally, research libraries supported broad-based collections to serve diverse programme needs. Interlibrary cooperation served a narrow margin of highly specialized graduate and research needs. As the building blocks for sharing scholarly resources are put in place over time, those core programs requiring local support become more narrowly defined. Thus, the margin of need met through resource sharing will expand.

While the core collection is more narrowly defined, the library's collections efforts are redirected to reinforcing its particular collections of strength. These collections are the contribution of member libraries to the strength of the virtual library. Rationalization of collections of strength among a number of institutions constitutes the only means by which libraries can continue to provide the academic community with access to the broadest range of scholarly literature.

3. Client-centered service.

While libraries have always seen themselves as service institutions, the success of the revitalized research library demands a re-orientation of its service system. Until now, the user has born the cost in time and effort of locating and retrieving materials. In the demand-driven model, the onus is on the library.

The client-centered library service units must be directed to effective service delivery, and not wedded to procedure. As these service units work more closely with their client groups, they must be capable of tailoring products and services to meet client needs more effectively.

4. Staff development and organizational change.

An organizational culture which is client-centred will demand a highly motivated, skilled, and flexible staff with a clear sense of mission and focus; a staff sensitive to changes in the information marketplace; a staff aware of new directions in scholarship. They must be liberated to experiment with new services and adapt present and emerging technologies to facilitate user access to information. The work environment must be such that creativity and development are encouraged. Organizationally, the planning period will be characterized by ambiguity and change. A necessary antecedent to client-centered service is that staff in the component libraries have the authority to develop services as they deem necessary. Accountability must reside at a level close to service delivery. Lines of authority will be fluid, structure will be less defined thus more complex, as arrangements are made to share staff expertise in a matrix environment.

5. Developing strategic alliances.

In the past, libraries have seen their cooperative efforts flounder in the face of institutional intransigence or inertia. Those reciprocal arrangements which did flourish were largely based on good will, not contractual agreements. Today's academic library leaders recognize that survival depends on their ability to develop strategic alliances. The depth of resources and quality of service available to the virtual library will depend on the breadth and strength of its contractual agreements -- agreements premised on reciprocal benefit.

The building and maintenance of cooperative agreements among institutions will require a significant commitment of resources from the library, and of political will and support from the parent institution and from government.

There are two essential linkages in building the networked environment.

The first is the development of regional/provincial library networks which cut across library sectors -- universities, colleges, as well as government, public, school and corporate libraries. All libraries are links in the intellectual fabric and each has something unique to offer to the network. All have a role to play in the economic and social infrastructure, and have the potential of contributing to the academic enterprise.

Recognizing that scholarship functions in a global context, the second linkage necessarily involves forging alliances with other academic and research collections at the national and international level. This will be facilitated by the development of high-speed computer networks such as the National Research Council network (CA*net) in Canada and the National Research and Education Network (NREN) now under discussion in the United States.

6. Partnership in Information literacy.

> *Instead of drowning in the abundance of information that floods their lives, information-literate people know how to find, evaluate, and use information effectively . . . Students have long relied on the knowledge of teachers and the information skills of librarians. In fact, when the volume of information was modest, they could often manage without becoming information literate themselves. What the information explosion has done is turn an old problem – functional illiteracy – into a new crisis. To address this crisis, we need a new educational philosophy based on a fuller understanding of the information explosion and a redefinition of literacy that includes information skills.*
>
> *(Patricia S. Breivik and E. Gordon Gee, **Information Literacy: Revolution in the Library.** (New York: MacMillan Publishing Company, 1989). p. 13.*

In the knowledge society, information skills are survival skills and form the basis for lifelong learning. Computer skills are just a small subset of information literacy -- students must be taught how to find, evaluate and use information effectively. The library must do its part to ensure that the graduates are competitive in an information intensive marketplace.

Librarians have always been involved in teaching information literacy. But the client-centered library will be characterized by librarians who have joined into a close partnership with faculty in the University's efforts to prepare its graduates to be full participating members in the information society. No longer set apart from the teaching, research and administrative functions, th library will become part of the teaching experience; information literacy will be integrated into the curriculum.

7. Creating the campus information network

The provision of reliable, transparent access to knowledge and information services within and beyond the library will be regarded as a utility, whose use is as common as the telephone or mail service.

The library will become an ever larger player as a node in the campus information network. Indeed, the library may function as a major catalyst in the evolution of this network, shifting today's focus on computing and hardware to the availability of resources on the network.

Into the Year 2000

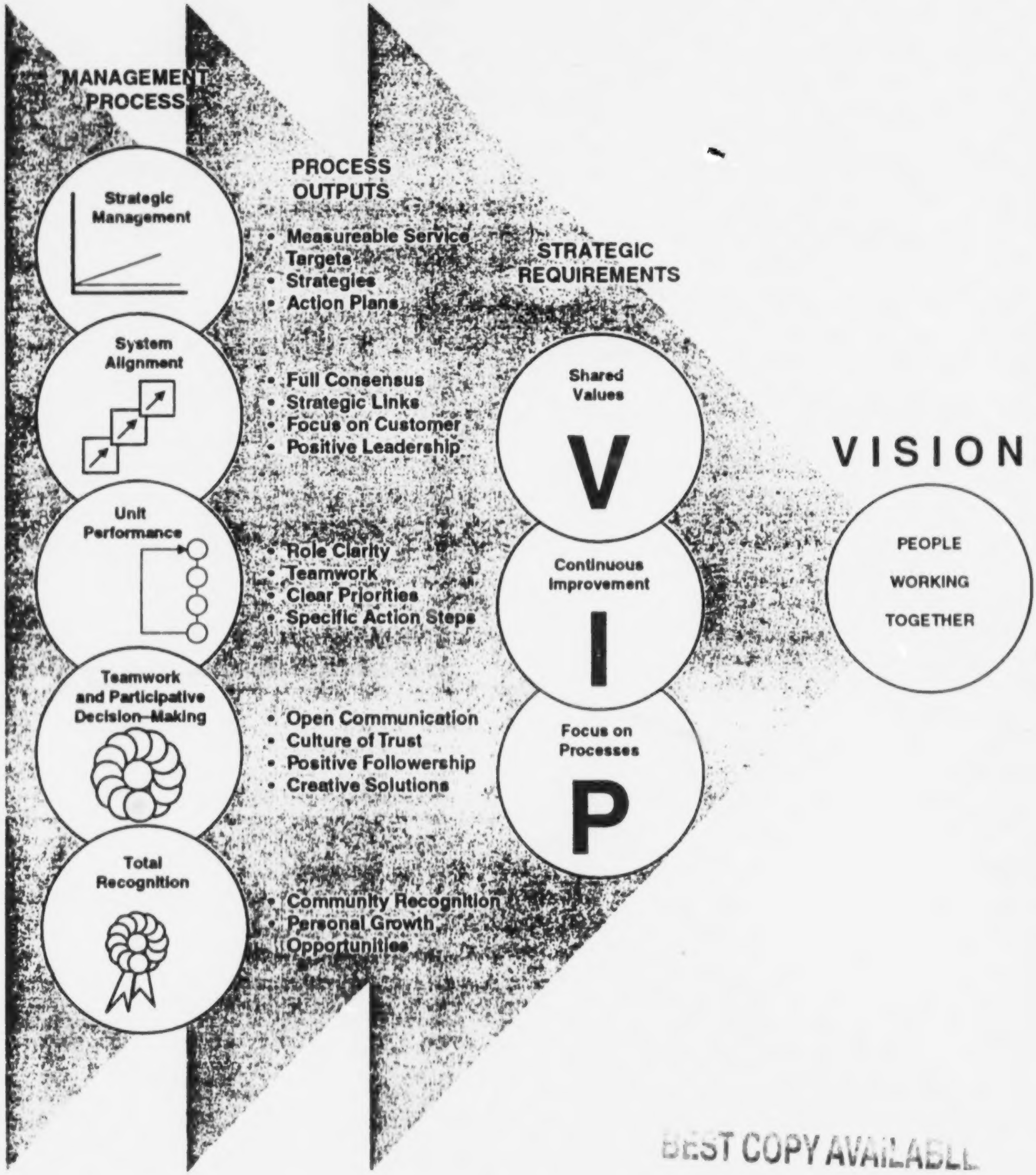
Over time, the success of the new paradigm will result in greater client self-sufficiency and less in-person use of the library as place. Academic productivity will increase. As university community members become proficient at accessing catalogues and databases from their own computers, and as technological developments permit these clients unmediated access to alternate information sources (i.e. full-text electronic data-bases), some clients will bypass the library, although many of the gateways they use will have been developed by the library network to this end.

New service horizons, impossible in the past due to the library's immobility, will now be available for distance education students, the business sector, other educational institutions, government, and the wider community. The library's base of support will be broadened, and it will be able to make a larger contribution to the research and educational efforts of the province and beyond.

In a more distant future, the evolution of the library's role in developing new forms of information management and access -- building the electronic equivalent of bibliographic control -- becomes more critical than ever, and its function as a repository on the network diminishes.

> *Today much of this information is available on electronic networks accessed directly or through designated node resource centers. In the future more of this information will not reside in other libraries but be held by electronic repositories, by publishers or even by authors themselves. This is why the creation and maintenance of electronic resources will be so critical to the successful use and operation of electronic networks.*
>
> *(Mary Ellen Jacob, "Libraries and National Library Networks", **Bulletin of the American Society for Information Science**, June-July, 1990, p. 9.)*

AN INTEGRATED MODEL FOR STRATEGIC MANAGEMENT


MANAGEMENT PROCESS
Strategic Management
System Alignment
Unit Performance
Teamwork and Participative Decision–Making
Total Recognition
PROCESS OUTPUTS
• Measureable Service Targets
• Strategies
• Action Plans
• Full Consensus
• Strategic Links
• Focus on Customer
• Positive Leadership
• Role Clarity
• Teamwork
• Clear Priorities
• Specific Action Steps
• Open Communication
• Culture of Trust
• Positive Followership
• Creative Solutions
• Community Recognition
• Personal Growth Opportunities
STRATEGIC REQUIREMENTS
Shared Values
V
Continuous Improvement
I
Focus on Processes
P
VISION
PEOPLE
WORKING
TOGETHER

BEST COPY AVAILABLE

OUR VISION

OUR MISSION

The mission of the Library System is to serve the information needs of the University and its communities by providing *effective access* to information resources within and beyond its walls, through a balance of traditional and *innovative* services.

OUR SERVICE

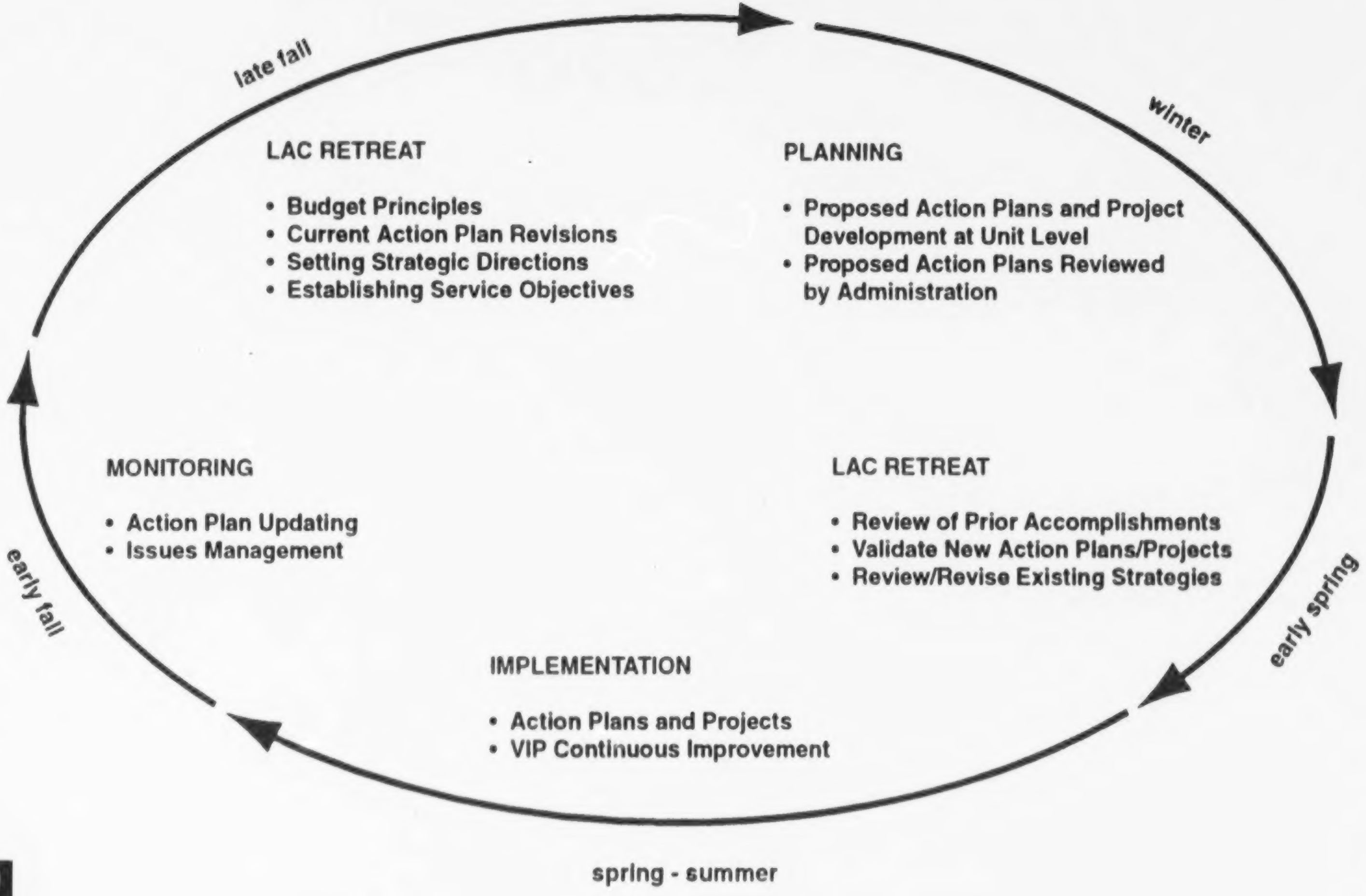
Building on strengths and achievements of the System and recognizing that self-sufficiency is not possible, the Library System will:

- **provide service, and instructional and *information literacy* programs focusing on the needs of the client;**
- **provide *core collections* for undergraduate student needs and basic graduate students needs;**
- **support enhanced graduate study and scholarly research by identifying, then developing collections of strength, and by seeking *strategic alliances* and *network solutions;***
- **embrace the opportunities afforded by *new technologies* to respond more effectively to changing needs;**
- ***protect library and archival resources* through internal and cooperative initiatives, developing strategies to preserve intellectual content and physical format as appropriate;**
- ***work as a single library system* constantly reassessing the allocation of resources to ensure equity and balance of service to constituents who have differing information needs, at differing times, with differing technological imperatives.**
- **be ever mindful of the often fragile and irreplaceable nature of *library resources* and the *corporate record*.**

OUR PEOPLE

The Library System will achieve this mission by *nurturing and developing its staff* in order that they are (i) knowledgeable in research methods, (ii) skilled in matters of information management, and (iii) innovative in their approach to service development and problem solving.

STRATEGIC MANAGEMENT CYCLE



LAC RETREAT

- Budget Principles
- Current Action Plan Revisions
- Setting Strategic Directions
- Establishing Service Objectives

PLANNING

- Proposed Action Plans and Project Development at Unit Level
- Proposed Action Plans Reviewed by Administration

LAC RETREAT

- Review of Prior Accomplishments
- Validate New Action Plans/Projects
- Review/Revise Existing Strategies

IMPLEMENTATION

- Action Plans and Projects
- VIP Continuous Improvement

MONITORING

- Action Plan Updating
- Issues Management

STRATEGIC MANAGEMENT CYCLE

The Strategic Management Cycle illustrated on the following page represents PLANNING activities and implementation of STRATEGIC projects - (i.e. those that have a medium-to- long term impact on the delivery of library services). It is implied, rather than stated, that underlying these activities, is the operational cycle of day-to-day client-service.

While the Strategic Management Cycle diagram is depicted in chronological order, the University's budget cycle, beginning late Fall and ending in Spring, is the key time period for envisioning the future and planning.

LAC RETREAT - LATE FALL

This is when the Library Administrative Council (LAC), discusses University guidelines for budgeting for the upcoming fiscal year, and establishes major shifts of direction that might be appropriate during the next two to three years. In this context, revisions to current Action Plans are confirmed and specific measurable Service Objectives are set. Mission and Vision values are kept front and centre for relevance and to ensure Strategies are linked to basic principles and values.

UNIT ACTION PLANNING - WINTER

Based on Service Objectives and proposed Strategies, each Unit head meets with her/his Unit to devise new Action Plans for the next one to three years and identify major new projects that might be undertaken.

These Action Plans and Project Proposals are discussed individually with the Chief Librarian and brought forward to the Strategic Management Group (SMG) within Administration who advise on what is feasible/not feasible to bring forward for validation by the full LAC.

LAC RETREAT - EARLY SPRING

This is the annual opportunity for joint celebration of accomplishments and provides the framework within which to come to consensus on new Action Plans.

Existing Strategies are reviewed and revised if necessary; completed Strategies are "removed" and new ones devised.

BUDGET/RESOURCE ALLOCATION APPROVAL AND IMPLEMENTATION - EARLY SPRING THROUGH TO LATE FALL

In Spring operating and capital budgets are approved and new projects and Actions get underway. Continuous monitoring inevitably raises new issues and opportunities. It is during this period that much activity is devoted to problem-solving and decision-making within the context of existing plans.

THE UBC LIBRARY
IN THE
YEAR 2000

A STRATEGIC PLAN

UBC LIBRARY

DRAFT

NOVEMBER 27,1991

UBC LIBRARY

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UBC LIBRARY

THE UBC LIBRARY'S MISSION

To provide outstanding access to the universe of recorded knowledge and information

The University is a place for the adventure of mind and spirit, a place to communicate with great intellects, both past and present. The Library is an active partner in this adventure. It provides the services and the access to knowledge, ideas, and information that are essential in a University committed to being a world-renowned institution of higher education and research.

The Library serves a large and varied clientele: first, the students, faculty, and staff of UBC, and, second, the Vancouver and Lower Mainland community, and other libraries and communities throughout British Columbia, Canada, and the world.

IN PURSUIT OF ITS MISSION, THE LIBRARY WILL STRIVE TO:

- Build comprehensive collections to sustain the Library's mission, collections which cover the period from the beginnings of recorded knowledge to the present, for today's users and for those in the 21st century and beyond.

- Stimulate in students a life-long interest in learning, and equip them with the skills needed in a knowledge-intensive society.

- Enable faculty and researchers to find and use effectively the information resources they require for the creation and transmission of knowledge.

- Uphold and encourage among Library staff respect for one another, and the custom of treating users with helpfulness and courtesy.

In the final analysis, the Library's strength lies in the dedication and quality of its staff. The Library is committed to fostering an environment that challenges and rewards them, encourages team spirit and a positive work attitude. Such an approach will guarantee the delivery of quality service to the Library's clientele.

THE HEART OF THE MATTER: AN INTRODUCTION

Since its founding, the University of British Columbia has had much to be proud of in its Library. The original Main Library, although considerably changed from the small, elegant building constructed in 1925, is still the heart of its campus, both figuratively and physically. Over the years, it has expanded and wings have been added to accommodate the Library's growing collections and services.

There are now more than a dozen branch libraries on campus which provide additional facilities, specialized services, and collections. Appropriate to the University's location at Canada's gateway to the Pacific Rim, the Asian Library, completed in 1981, houses one of the most extensive collections of Asian-language material on the continent. The Crane Library maintains one of the finest collections of large-print, Braille, and spoken-word material in the country. The Woodward Library has the largest biomedical collection in Western Canada, and three health science libraries, located in Vancouver hospitals, are also part of the University's library system.

WHAT MAKES THE UBC LIBRARY UNIQUE?

The UBC Library is one of many large research libraries on the North American continent, but there are important factors which make this Library different from others.

The University's physical remoteness from other major Canadian universities meant that, throughout much of its early history, the Library was largely dependent on its own resources. Since its founding, the Library has attracted and retained the services of skilled and dedicated staff and obtained many generous gifts, both in money and in kind. Consequently, extensive and in-depth collections ranging from manuscripts and rare books to the latest electronic databases have been built. These collections represent a rich resource for the people of this province, as well as for libraries in the rest of Canada and much further afield. The Library's role as a unique provincial resource and as a major Canadian research library has important service implications.

The UBC campus is one of the largest in North America. Stanford University in California compares in size, but

> *comparison with the other two top Canadian universities (McGill and Toronto), show whole campuses, of roughly similar student enrolment and faculty/staff populations, containing all the ... facilities within perhaps half the area consumed by similar facilities at UBC.*

University of British Columbia, *1991 Campus Plan: draft statement of planning principles*.

The enormous size of the UBC campus led to the development of a highly decentralized library system with the many administrative and financial challenges associated with the planning, delivery, and cost of decentralized services.

UBC is a research-intensive university, committed to extending its research activities in many fields. In addition, growing numbers of international students, particularly from the Pacific Rim, are attending the University. Because of these factors, the Library has developed increasingly research-oriented, as well as extensive foreign language, collections.

The characteristics described above are important in understanding both the present shape of the Library system, and the unique influences on its future development.

THE PRESENT

The Library serves a large and diverse community. The University's students form its largest user group: about 22,900 undergraduate and 4,800 graduate students were registered for full-time degree courses during the 1990/91 Winter Session. In the same year, there were 1,870 full-time faculty members and over 3,500 full-time salaried staff. In addition, the Library serves affiliated researchers, and part-time students, faculty, and staff. It is also a provincial resource library for users from other post-secondary institutions, private industry, and the general public.

LIBRARY SERVICES

The Library's many services are provided by about 350 Library staff. Public services fall into several broad areas: reference and information; orientation and instruction; circulation; interlibrary loan; the Health Sciences Network; and space and facilities. The Special Collections Division and the University Archives provide important, specialized services. Public services are underpinned by the work of the Library Administration, and the Collections, Processing, and Systems Divisions.

Reference and information services are provided in all branches of the Library. The Library's primary clientele, students, faculty, and staff, receive a complete range of services, with fees being charged for a few specialized services. General reference services are also available to secondary clientele, including non-UBC students and faculty, users from business and industry, professionals, and members of the general public. Some of these users are charged a fee for lengthy research assistance and higher fees than UBC users for specialized services.

The Information and Orientation Division organizes general Library tours for students and visitors, and produces newsletters, information sheets, displays, and signs. Librarians in reference divisions and branch libraries give orientation tours, as well as classes for specific clientele. Reference librarians also prepare instructional handouts, and, in the course of reference interviews, provide individual instruction.

The Circulation Division organizes the borrowing of library materials throughout the Library system and manages associated records and collections. Eligible borrowers in a variety of categories, some of whom pay a service fee, are clearly defined. A film and video booking service is available. Reserve services, which ensure that students have access to high-demand materials, are widely available.

Interlibrary Loan is a comprehensive access service for borrowing materials from, and lending UBC materials to, other libraries. The Division participates in a number of interlibrary networks and provides management services to some of them.

The Special Collections Division houses a wide variety of unique and valuable materials, from rare books, manuscripts, and early maps, to coins and Babylonian clay tablets. Its collections in Canadian literature and history are particularly strong.

The Library also provides an important campus-wide administrative function through its operation of the University Archives. In addition to storing archival collections relating to the history and development of the University, the Archives is developing standards for the identification and permanent storage of all important University records, standards which will help to preserve the University's institutional memory.

The Health Sciences Library Network provides almost immediate access to the collections held in UBC's four health science libraries through interlibrary loan services to users of the UBC-affiliated hospital libraries. Limited services for a fee are also provided to unaffiliated hospital libraries.

Space and facilities for users are available throughout the Library system. This includes study space as well as equipment such as photocopiers, microform readers and printers, computer terminals, and CD-ROM workstations.

The Library clearly provides a comprehensive range of services. The statistical evidence is equally impressive: the Library's collections, which represent one of its greatest strengths, comprise some 8.4 million physical items including books, serials, non-print items such as films, sound recordings, microfilm, CD-ROM discs, computer tapes, and special collections such as archives, manuscripts, maps, and rare books. During the 1990/91 academic year, over 2 million library items were circulated, 28,200 items were lent to other libraries, 14,900 items were borrowed on interlibrary loan; and 428,000 reference and information questions were answered. In circulation and reference activity, UBC continues to be in the top rank of academic research libraries in North America.

CURRENT INITIATIVES

This document deals with the long-term goals of the UBC Library. However, there are many immediate challenges, some of which the Library has already begun to address. For example, parts of the automated library system are urgently in need of replacement or drastic overhaul. A number of task forces worked in this area for almost a year: requirements for a new system were defined, a Request for Proposal was issued, and three short-listed systems were evaluated in detail. On the basis of the information gathered during this process, it was decided that, at least in the short-term, local systems development will be pursued actively.

Solutions to space and building problems are also being sought. A facilities planning librarian has been appointed, and planning for a new Library building is in progress. This building, which will be integrated with the undergraduate library to form a new Humanities and Social Sciences Library, will provide the opportunity to put into practice many of the proposals contained in later pages of this strategic plan.

THE FUTURE

The Library's achievements, built in partnership with the University and the community, reflect the dedication, skill, and foresight of generations of Library staff. As the twenty-first century approaches and the information age advances, it is time for the current generation of Library staff to take stock and to define their agenda for the future. The information age is both revolutionary and categorically different from previous ages:

> *We are facing a social revolution driven by rapid evolutionary changes in computer, communications, and information technologies and by the interaction of those technologies with our social institutions. This revolution, evolving from the convergence of a constellation of new technologies, involves the entire fabric of society. It changes where and how people work, live, play, and pray. It brings new social patterns and cultural values.*
> Ronald R. Doctor. *Information technologies and social equity: confronting the revolution.* Journal of the American Society for Information Science, 42(3):217, 1991.

In a society which places a premium on access to information, and in a university dedicated to being a world-renowned centre of learning, UBC

Library staff, with their expertise in information management, intend to take the lead in defining and shaping a swiftly changing information environment for the benefit of the University, the Library, and its users.

THE STRATEGIC PLAN

The first step towards defining and directing this information environment was the preparation of a strategic plan. The purpose of strategic planning is to re-evaluate and re-think the shape of an organization, and to formulate desired goals for the next five to ten years. At the same time, basic organizational tools must be developed for building the support needed, both inside and outside the Library, to implement these goals. (See Jeffrey J. Gardner, Strategic plans in ARL libraries. Washington, D.C.: Association of Research Libraries, 1989). Although the purpose of a strategic plan is to address the future, Library staff agreed that their vision for the future should be firmly rooted in the many fine achievements and successes of the past.

A strategic plan is a living document, to be re-evaluated and adapted regularly in light of changing circumstances and perceptions. In order to implement this plan, a detailed action plan must be developed. The latter will describe the practical steps to be taken during the coming months and years to realize the Library's vision for the future.

The context of the strategic plan is provided by the organizational values and by the vision of the UBC Library in the year 2000 as defined by Library staff.

ORGANIZATIONAL VALUES

UBC Library staff are committed to the following organizational values:

SERVICE

The Library fosters and supports teaching, learning, and research by providing access to knowledge, information, and ideas, and by providing assistance and instruction. Fundamental to this philosophy of service is a commitment to freedom of information.

INTEGRITY

The Library recognizes its essential role within the educational system and is dedicated to creating an environment centred on ethical behaviour, accountability, and honesty. The Library is committed to the principles of academic freedom and open communication.

INNOVATION

The Library identifies and anticipates user needs and responds with the appropriate resources and services. It is a dynamic institution which embarks in new directions, using the latest technology, to serve the changing needs of its users. The Library recognizes the need for continuing review and renewal.

EFFECTIVENESS

The Library delivers efficient and timely quality services to its communities within its financial constraints, using sound management practices. It encourages and supports the development of a knowledgeable, versatile, and skilled staff.

COMMUNITY

The Library operates supportively and equitably. It advocates openness and tolerance, and recognizes the benefits of human diversity. It provides a place for study, discovery, and intellectual endeavour beyond the classroom.

WELL-BEING

The Library recognizes the importance of the physical and emotional well-being of its staff and users. It strives to improve the working environment and promotes a healthy lifestyle for all.

FUN

The Library encourages camaraderie and a spirit of adventure in carrying out day-to-day tasks. It promotes an enjoyable workplace where laughter and a sense of perspective are incorporated into the routine.

COURAGE

The Library takes creative risks to meet its heroic challenge—organizing, disseminating, and preserving knowledge in order to make the UBC Library a place of learning and discovery.

VISION STATEMENT: THE UBC LIBRARY IN THE YEAR 2000

> *The UBC Library is the focal point of the University, essential to the work of every faculty on campus at all levels of teaching and research.*
> David W. Strangway. *President's Report on the Library.* UBC, 1987, p. 4.

In the 21st century the historic patterns of library service will be transformed by the changing needs of the University's research community and the opportunities afforded by new information technologies. Diversity of information provision and flexibility of service will characterize the Library of the future.

GATEWAY TO INFORMATION

In the 21st century, the UBC Library will continue to be a gateway to the world's growing store of complex information. Four keys are needed for success in this role: comprehensive access to information, strong collections, excellent service, and education programs.

INFORMATION ACCESS

In the year 2000, the Library will have an integrated information system which provides networked access to bibliographic, full text, and other databases, regardless of location, for students and faculty from their microcomputers and workstations. The online information system will be co-ordinated with more traditional modes of access, such as printed materials.

COLLECTIONS

The Library's collections will continue to be the foundation for the University's teaching and research functions and for the Library's provincial resource role. Co-ordinated collection development will ensure coverage of inter-disciplinary fields and new areas of study. Library staff will continue to select, acquire, and organize materials for use, ensure that all resources are easily accessible, and that their availability is widely publicized.

Preservation of the collection in all its formats, ranging from print to multimedia to electronic, will continue to be vital to fulfill the Library's service mission. Preservation will require co-operative efforts with other libraries, as well as specialized facilities and continuing funding at UBC.

Publishing both in print and electronic formats will increase steadily. At the same time, the library budget is likely to remain fairly constant. The UBC Library will meet this challenge by shifting emphasis from ownership of documents to provision of access, in particular, access to electronic materials, and by participating in co-operative collection development programs. The growth in electronic publishing will occur at varying speeds in different disciplines, and an increasing array of materials, such as full texts of books and periodicals, will be readily accessible via local, national, and international networks. A flexible library budget will accommodate these shifts in publishing from print to electronic media.

SERVICES

The Library will serve a multitude of users, with services designed to meet their varying information needs. The primary clientele, then as now, will be UBC students, faculty, staff, and affiliated researchers; the secondary clientele will come from other post-secondary institutions, private industry, and the general public. The organizational structure of the Library will emphasize services to discipline-oriented or special user groups.

Library staff will continue to help users identify their information needs and determine how to satisfy them. Many librarians will be partners in the academic research process, acting as specialized information consultants to groups of users. Such outreach librarians will, where appropriate, maintain offices in close proximity to user groups. Library services will be tailored to meet demonstrated needs. For example, undergraduates will be provided with course-related information quickly, and researchers with detailed and specialized sources. Similarly, the Library will continue to serve the needs of disciplines which primarily use current information, as well as those that are more dependent on comprehensive, retrospective collections.

Various levels of service will meet the diverse needs of library users. Access to the Library and its basic services will be provided free of charge and improved systems and facilities will promote self-service among users. Value-added services, at an appropriate cost, will support high-level research and unique user requirements. For example, a campus-wide document delivery service, provided at a reasonable fee, will ensure rapid access to materials held locally and elsewhere.

EDUCATION AND PROMOTION

Library staff will play an increasingly important role in educating users, and will provide instruction in the sources, organization, and use of information, especially electronic information. Much of this training will be aimed at encouraging user independence in the use of collections and facilities. Instruction for students will be integrated into the curriculum.

The Library will have an ongoing, systematic promotion program to inform its clientele about library services, and about information sources and access methods.

LIBRARY'S ROLE IN UNIVERSITY AND COMMUNITY

The UBC Library, as an active partner in the research and teaching mission of the University, will support faculty in their research and teaching programs and will identify and anticipate the services and collections required.

The Library, as the chief information provider for the campus, will continue to take the lead in acquiring and organizing information. The Library will participate in the continuing development of the campus information network and the scholarly workstation to ensure access to its databases, on and off campus, at any time. It will co-operate with campus computing, networking, and information services to maximize the use of resources and prevent duplication of services.

Recognizing its role as a major provincial resource, the Library will participate actively in the development of provincial information networks.

In the year 2000, the proliferation and variety of information sources, the growth of computer networks, and of international bibliographic and technical standards will make library co-operation on a world-wide scale both feasible and essential. The Library's active collaboration in local, regional, national, and international information networks and bibliographic endeavours will grow to ensure access to the universe of information for the UBC academic community. Reciprocally, the UBC collections will be available to the world's community of researchers and scholars.

The UBC Library will continue to be open to the community, reflecting the University's outreach philosophy. The Library has many community friends and donors who enrich and sustain it. Extra support for its community role will be sought, in order that services to other clientele are not adversely affected.

LIBRARY AS PLACE

In the year 2000, use of the Library's physical collections will continue. Most users will also have computer connections to the Library's databases. The Library will continue to be a cultural centre for faculty, students, and others. It will provide a place for quiet study and contemplation, for scholarly communication, and for the generation of knowledge.

The Library's collections of books, serials, microforms, manuscripts, audio-visual, electronic, and other materials will be housed under optimum conditions. There will be convenient space for users to use the collections and to consult Library staff. Public-access terminals and microcomputer-equipped instruction facilities will be available.

BROWN UNIVERSITY LIBRARY GOALS AND OBJECTIVES FOR THE NINETIES

INTRODUCTION

This detailed five-year plan was developed as part of a major effort by the Library Administration to review and update *Goals and Objectives for the Eighties*, the Brown University Library's long range plan issued in 1985. The current plan represents an assessment of the needs of the Brown University Library in the period 1990-1995 and was developed in concert with the Library Department Heads and after extensive review by staff at all levels.

In developing the plan, an assumption was made that the provision of scholarly information in today's academic environment involved six separate but interdependent areas. For the sake of simplicity, clarity, and organization, *Goals and Objectives for the Nineties* is arranged by these six overarching categories. The six areas listed below represent crucial aspects of the Library's mission and are not listed in priority order:

I. The rationalization and continued development of the Brown University Library collections, in keeping with the strengths of the past, the academic and research needs of the present, and the foundation which must be established for the future.

II. The commitment to the best possible service for the Library's primary as well as our extended clientele, a commitment which includes speedy access to information wherever it resides, in whatever format it appears.

III. The preservation of the Brown University Library collections for use by generations of scholars to come.

IV. The creation and maintenance of appropriate physical facilities for materials storage and service, as well as comfortable and efficient reader study and staff space.

V. The recognition that the likelihood of continued, significant improvement in Library collections, facilities, and services rests in part on our ability to raise outside funds devoted to that purpose. Furthermore, that it is in the University's interest to do as much as possible to publicize the richness and variety of the Library collections.

VI. The commitment to provide a satisfying and challenging work environment for Library staff at all levels, and to make staff development opportunities readily available to all.

Merrily E. Taylor
University Librarian
January 15, 1990

I. THE RATIONALIZATION AND CONTINUED DEVELOPMENT OF THE BROWN UNIVERSITY LIBRARY COLLECTIONS, IN KEEPING WITH THE STRENGTHS OF THE PAST, THE ACADEMIC AND RESEARCH NEEDS OF THE PRESENT, AND THE FOUNDATION WHICH MUST BE ESTABLISHED FOR THE FUTURE.

A. **Continue the integration of the Library and its collections into the academic planning process.**

1. Encourage a more active role for Collection Development Librarians in providing information about the Library to Academic Departments.
2. Set up a mechanism within the Library for better sharing of information about new academic programs.
3. Insure that the *Collection Development Policy* is kept up-to-date and that Department Library Representatives are kept well informed about the existence of the Policy as well as about changes in it.
4. Work with appropriate staff at all levels of the University to establish links between academic planning and the budgeting of Library acquisitions.
5. Establish improved methods of communication with Academic Departments, Centers, and Programs which have established their own reference collections/libraries.

B. **Acquire the basic materials needed to support the instructional and research programs.**

1. Continue to establish approval plans for the acquisition of scholarly materials and to evaluate existing plans.
2. Actively solicit user opinion on the adequacy of the collections to support research and teaching.
3. Establish, implement, and analyze a procedure for acquiring out-of-print and other retrospective materials.
4. In keeping with the objectives of the University, improve the Library's ability to select and obtain non-Western language materials.
5. Work toward better integration of Special Collections into the Collection Development process.
6. Duplicate selected monographs as appropriate, especially those used in support of undergraduate instruction.

C. **Enhance, support and strengthen the collections which are recognized as Brown University's Collections of Record.**

1. The Harris Collection of American Poetry and Plays.
2. The McLellan Lincoln Collection.
3. The Mathematics and History of Mathematics Collections.
4. The History of Science and History of Medicine Collections.
5. Collections in Pseudoscience, Magic, and the Occult.
6. The Egyptology Collection.

D. **Develop a policy for the acquisition of non-book materials.**

1. Integrate non-book materials into the Collection Development Policy.
2. Explore replacing selected print versions of information with electronic/online equivalents.
3. Survey electronic data bases available on campus.

4. Facilitate cooperation between Collection Development librarians and the Heads of Media Services and the Art Slide Library.
5. Develop mechanisms for linking decisions to purchase non-print materials with the provision of adequate storage facilities and viewing/reading equipment.

E. Study and evaluate the collection development process and make changes/improvements if indicated.

1. Increase the range of scholarly expertise and involvement on Library staff to a level suitable for dealing with collections which support an increasing number of research/doctoral level programs.
2. Evaluate the effectiveness of the present subject allocation system.
3. Integrate resource sharing into analysis of collection usefulness.
4. Expand the number of Library staff involved in Collection Development.

F. Achieve and maintain a Library Materials Budget which is in balance with the curricular and research needs of the University, which adequately supports our unique Special Collections, and which is flexible enough to permit efficient Library response to problems and opportunities.

1. Increase the Library's income share from its endowments; recognize the impact of endowment growth by growth in annual income received.
2. Maintain University support at a level sufficient to deal with inflation or to permit the Library to purchase no less than 50,000 books a year.
3. Designate an appropriate portion of the budget for the acquisition of non-book materials, including CD-Roms and audiovisual tapes.
4. Develop mechanisms to protect foreign purchases from the effects of dollar devaluation.
5. As part of the ACUP process, establish a separately negotiated budget increase for serials.
6. Achieve a goal of spending no less than $200,000 annually on acquisitions for Special Collections; commit no less than 5% of the Library Appropriations budget to the support of Special Collections acquisitions.
7. Secure funding to permit a necessary level of duplicate purchasing, especially for materials of special interest to undergraduates.
8. When priority retrospective purchases have been completed, convert NEH income to support of current acquisitions in the humanities.

II. THE COMMITMENT TO THE BEST POSSIBLE SERVICE FOR THE LIBRARY'S CLIENTELE, A COMMITMENT WHICH INCLUDES SPEEDY ACCESS TO INFORMATION IN WHATEVER FORMAT IT APPEARS.

A. Monitor user opinion on Library services, both current and desired.

1. Carry out a User Survey in Spring, 1989, and repeat every four years or more often if necessary.
2. Through Collection Development Librarians and Library Administrators, maintain routine contacts with Academic Departments and use these contacts to collect information about Library services, both existing and desired.
3. Through appropriate training and support, encourage a positive response from staff at all levels to user concerns and suggestions.

B. Implement new services as identified by user need and staff analysis, and monitor impact on existing services.

1. Develop better mechanisms for "costing out" services and predicting the impact of a new service on existing operations.
2. Develop better mechanisms for evaluating the value of new services as against existing services.
3. Improve means for articulating the link between the availability of staff resources and the delivery of efficient and up-to-date services.
4. Explore ways of cooperating with Computing and Information Services on mechanisms and staffing to permit the delivery of library materials, Media Services equipment, and computing equipment to departments on campus.
5. Expand online reference service through the campus network.
6. Re-evaluate Reference Desk service and staffing levels.

C. Enhance the Library's ability to meet user needs through participation in Shared Resources programs and through the use of high-speed technology for the delivery of requested material.

1. Take full advantage of resource sharing possibilities through membership in consortia, knowledge of collections available elsewhere, and the development of specific agreements with local institutions such as MIT.
2. Given the appropriate resources, make available on campus the data bases of important resource-sharing institutions such as the Center for Research Libraries and the National Library of Medicine.
3. Cooperating with CIS, integrate the collections of the affiliated hospital libraries into Josiah and continue active cooperation with affilliated hospital librarians.
4. Apply new information technologies to medical library services.
5. Introduce Fax machines to the Library's Interlibrary Loan process.
6. Explore vendor document delivery services as an alternative to traditional interlibrary loan.
7. When feasible, make full text data bases available as an alternative to the purchase of the same titles in hard copy.
8. Consider fee-based services as a way of making information available to some special clienteles.
9. Continue work with RLG to develop a link between Josiah and RLIN, to provide user access into a larger data base.
10. Analyze the effect on staff of increased resource sharing.

D. Make all the materials in the Brown University Library collections easily accessible through full retrospective conversion, timely processing, distributed cataloging, elimination of all but the working backlog, and technical services resources which are in balance with the volume of materials received.

1. Complete retrospective conversion, including conversion of materials which may require sophisticated re-cataloging.
2. Work with affiliated hospitals toward retrospective conversion of hospital library collections.
3. Provide access to on-order and selected uncataloged materials through Josiah, eliminating the MUC.
4. Take advantage of Josiah to distribute some technical processing activities to other Library locations/departments.

5. Complete a plan to catalog those items in the backlog which are deemed appropriate for full, standard cataloging.
6. In fundraising or in the solicitation of large gift collections, establish a component to support the technical processing of the material in question.
7. Within Technical Services, continue efforts to analyze workflow, to eliminate redundancy, and to apply differing levels of cataloging to materials as appropriate.

E. Improve access to information and speed of service through the use of new formats for storage and retrieval of data.

1. Continue the acquisition of indexes, abstracts and other scholarly resources on compact and/or optical disk.
2. Obtain the necessary support for acquisition and maintenance of the equipment which is necessary for access to information in electronic form.
3. Maintain formal consultation lines with CIS and IRIS.
4. Within legal limitations, make material on compact/optical disks available through the network.
5. Incorporate information about new technologies into the user education program.
6. Obtain portable PC equipment for use in classrooms.
7. Build permanent support for new information technology into the Library budget base.
8. Expand computer clusters for users within the Libraries.
9. Include these materials in user needs assessment and evaluation efforts.
10. Take full advantage of consortial resources, for example, RLG's PRIMA program.

F. Re-design the Library's user education program to provide instruction on use of information tools, bibliographic file management, and end-user searching.

1. Work with Deans' Offices and faculty to improve the Library's outreach services.
2. Design and offer library sponsored end user training in searching techniques either through the user friendly software offered by vendors (e.g., BRS After Dark, Medline, etc.) or other packages.
3. Consider Computer Assisted Instruction tutorial modules, using hypercard, in the use of particularly difficult reference, indexing, and abstracting tools.
4. Consider on-line, advanced instruction in the use of Josiah (especially for direct command searching).
5. Work with CIS on joint planning for providing user consultants in searching and text/file management.
6. Build support into the budget base for these and other activities.

G. Develop Josiah into a fully-integrated Library information system, with functioning acquisitions, circulation, and serials modules.

1. Achieve basic University support for system maintenance and development.
2. Explore advantages and disadvantages of available acquisitions, circulation, and serials modules.
3. In conjunction with CIS, complete survey of data bases on campus.
4. Explore priorities, means, and costs for making non-traditional information available through Josiah (audiovisual material, data bases etc).
5. Load all retrospective conversion records into Josiah and into RLIN.
6. Close the card catalog no later than June, 1989.
7. Work with CIS to implement a Josiah network interface and downloading capability, as well as remote printing and e-mail connections.

8. Study impact of Josiah on work routines of Library departments.
9. Expand Josiah terminals within libraries to additional locations, such as stack areas.
10. Begin developing a "want-list" for the next generation on-line Library information system (that is, the successor to Josiah).

III. THE PRESERVATION OF THE BROWN UNIVERSITY LIBRARY COLLECTIONS FOR USE BY GENERATIONS OF SCHOLARS TO COME.

A. Establish a coordinated Preservation Program for the Library, with staff, facilities, and budget as appropriate.

1. With appropriate Library staff, review the recommendations of the Preservation Study and implement as many as are appropriate and feasible.
2. Transmit information from the Preservation Study to the University Administration and to the Development Office, for purposes of budgeting and fundraising.
3. As appropriate, re-write position descriptions and re-design the organization to reflect changes recommended in the Preservation Study.
4. Create the permanent position of Preservation Librarian.
5. Establish a separate budget for a Preservation Department within the Library.
6. Provide routine staff, student, and user education on preservation issues.
7. Take advantage of new funding and consortial memberships to establish a role for the Brown University Library in the national preservation effort.

B. In a systematic fashion, apply conservation treatments as needed to the Brown University Library collections.

1. In cooperation with Collection Development, survey collections to gain knowledge of preservation work required.
2. Establish priorities for sections of the collection to receive preservation treatment.
3. Integrate preservation routines into all Library operations, including collection development, processing, and circulation.
4. Designate an appropriate part of the Library Materials Budget for repair, replacement, and conservation of deteriorating materials.
5. Improve staff awareness about the particular preservation problems connected with non-print materials.

IV. THE CREATION AND MAINTENANCE OF APPROPRIATE PHYSICAL FACILITIES FOR MATERIALS STORAGE AND SERVICE, AS WELL AS COMFORTABLE AND EFFICIENT READER STUDY SPACE.

A. Insure the best physical environment for the preservation of Library collections in all formats.

1. Request the Preservation Librarian or an appropriate designate to monitor the physical environment in all library stack areas on a regular basis.

2. Secure legal permission and appropriate funds to proceed with the renovation of space in the Annmary Brown Memorial for environmentally controlled materials storage.
3. Continue efforts to improve air quality, temperature, and humidity control in library buildings.
4. With Plant Operations, investigate the possibility of obtaining outside maintenance contracts for the major library buildings.
5. Revise Disaster Plan and see that it is updated routinely.
6. Obtain the proper type of storage supplies/equipment for all materials, regardless of format. because of existing problems, give special priority to microfilms.

B. Insure that reader service and collection areas are modern, efficient, pleasant, and adequate for both user comfort and convenience and collection preservation and security.

1. Provide for the adequate storage, servicing, and viewing of media of all kinds.
2. Complete renovation and equipping of the 14th Floor of the Sciences Library as a Media Service Center.
3. Implement Media Services Strategic Plan according to the funds available.
4. Renovate the Art Slide Library to allow for expansion of slide storage and user space.
5. Complete the renovation of the Rockefeller Library, including a new Microform Reading Room.
6. Monitor growth of the collections and plan for space adjustment as necessary.
7. Work with the University to establish a budget for routine replacement of deteriorating furniture in reading rooms and other public spaces.
8. Move incunables and most valuable paintings from the Annmary Brown Memorial to the John Hay and renovate space in the Hay for the Annmary Brown Collection.
9. Plan for the use of space now occupied by the public catalogs.

C. Strive for a comfortable, clean, and efficient work place for all members of the Library staff.

1. Continue work with Plant Operations to improve cleanliness, temperature control, and air quality in Library buildings, for staff and users alike.
2. Complete renovation of Technical Services space in Rockefeller Library and improve additional staff workspaces as feasible.
3. As appropriate, involve staff at all levels in decisions about the furnishing and equipping of staff spaces.
4. Improve mechanisms for replacing deteriorating equipment and furniture and for providing work supplies in an efficient and timely manner.

V. THE RECOGNITION THAT THE LIKELIHOOD OF CONTINUED, SIGNIFICANT IMPROVEMENT IN LIBRARY COLLECTIONS, FACILITIES, AND SERVICES RESTS IN PART ON OUR ABILITY TO RAISE OUTSIDE FUNDS DEVOTED TO THAT PURPOSE. FURTHERMORE, THAT IT IS IN THE UNIVERSITY'S INTEREST TO DO AS MUCH AS POSSIBLE TO PUBLICIZE THE RICHNESS AND VARIETY OF THE LIBRARY COLLECTIONS.

A. **Increase the Library's endowment and the income which may be used to support acquisitions and programs.**

1. Raise $22 million in new endowment.
2. Work with University administration to establish a formula by which the Library may benefit from new endowment income without losing an equivalent amount of annual University budget support.
3. Build acquisitions support through the Friends of the Library, especially via the Charles Coffin Jewett Fund.
4. Secure endowment funding for the Preservation Program.
5. Establish endowments for "fundable" Library positions, including those of the University Librarian, the Assistant University Librarian for Special Collections, the Music Librarian, and the Preservation Librarian.

B. **Maintain fundraising for the Library as a University priority and work with appropriate University staff to see that fundraising is efficient and in harmony with Library objectives.**

1. Maintain a Library Liaison in the Development Office.
2. Establish the Library as a basic priority in all University campaigns and "mini-campaigns."
3. Articulate the Library's fundraising/programmatic goals to the Administration, to faculty, and to Development/University Relations staff.
4. Develop "case statements" for specific needs and subject areas within the Library.
5. Whenever possible, establish funds for technical processing as a part of fundraising/gift proposals.
6. Secure funding for key capital projects, such as the renovation of the Rockefeller Library, the remodelling of the Annmary Brown Memorial, and the completion of the 14th Floor of the Sciences Library as a Media Services Center.

C. **Continue the growth and development of the Friends of the Library.**

1. Working with the Friends Board, establish directions for the future.
2. Increase size of membership as much as possible, but at a minimum maintain present membership level.
3. Bring new Friends into positions of responsibility in the organization.
4. Get Friends Holiday Card project on a stable financial footing and move away from reliance on "outside help."
5. Consider additional/alternative Friends publications and other mechanisms for bringing attention to the collections.
6. Make the Friends self-supporting by the end of 1994.

VI. THE DESIRE TO PROVIDE A SATISFYING AND CHALLENGING WORK ENVIRONMENT FOR LIBRARY STAFF AT ALL LEVELS, AND TO MAKE STAFF DEVELOPMENT OPPORTUNITIES READILY AVAILABLE TO ALL.

A. **Examine the operations and staffing in the Library with the purpose of maintaining a level of performance which is effective, efficient, and user oriented.**

1. Encourage all supervisors, in consultation with staff, to consider alternative ways of providing service and performing unit operations.
2. Undertake systems studies where appropriate.
3. Complete a staffing plan for the Library.
4. Complete the User Survey and consider staffing implications of the results.
5. Through education and communication, encourage a pro-active public service philosophy on the part of all staff in all Divisions.

B. **Maintain the Professional Program for Librarians and make sure that the benefits and obligations of the two-track system are understood by all professional staff.**

1. Distribute revised Program to all librarians.
2. Hold meetings to explain Program to all librarians.
3. Designate the Administrative Assistant to the University Librarian as the Library's Professional Development Consultant, to assist librarians in planning professional growth within the Brown system.
4. Encourage the Professional Program Committee to continue regular monitoring of the Program's performance.
5. Through the 21st Century Fund and other sources, make it possible for all librarians to enhance their skills and professional knowledge through regular attendance at conferences, workshops, seminars, and other programs as appropriate.
6. Provide mechanisms for librarians to "re-train," or "re-tool" according to personal interest and the developments in information technology.

C. **Encourage staff at all levels to participate in Library planning and to take advantage of Staff Development opportunities.**

1. Encourage all supervisors to manage by objectives and to utilize a consultative style in unit planning and decision-making.
2. Review Library Committee structure and membership on a regular basis.
3. Through the 21st Century Fund and other resources, encourage staff to participate in Staff Development activities both within and outside of the Library.
4. Investigate the effectiveness, adequacy, and distribution of the existing Library travel budget.
5. Encourage all staff to develop their expertise in areas relevant to the Library's mission, especially the new information technologies.
6. Improve on-the-job training for staff, for example in use of RLIN, in data base theory and management, and in the MARC format.
7. Build the requirement for understanding the new information technologies into the Library's recruiting efforts, as appropriate given the position in question.
8. Continue to seek ways to improve communication within the Library, both by traditional mechanisms and by making use of electronic mail.

A Vision for Future Information Services at Brown University: Mission Statement and Goals for the Year 2000

Brown University Library
Providence, Rhode Island
December 15, 1994

Mission Statement

The mission of the Brown University Library is to support the fundamental purpose of the University, which President Henry Merritt Wriston (1937-55) defined as "the increase of knowledge, the inculcation of wisdom, the refinement of emotional responses, and the development of spiritual awareness." Brown is committed to the concept of the liberal arts university-college, maintaining both comprehensive undergraduate concentrations and a wide array of research and graduate programs.

In keeping with this commitment, and under the standards and ethics of Librarianship, the Library provides collections and information services which support the curriculum, facilitate primary research, meet the appropriate criteria for accreditation, and serve as a resource for the academic and administrative offices of the University. The Library works actively to develop the collections in the light of past strengths, and present and anticipated needs; to make information readily accessible, whether within its own collections or elsewhere; and to preserve the collections for the use of future generations. In direct support of this mission and in response to the rapidly changing world of information technology, the Library strives to provide a satisfying and challenging work environment for Library staff, with education and training opportunities readily available to all.

As one of the nation's major research libraries, the Brown University Library is a resource not only for Brown faculty, students, staff, and alumni/ae, but also for scholars in the region, the nation, and the world. Accordingly, the Library makes strengthening and preserving its "collections of record" a priority, and participates energetically, through a variety of organizations, in regional, national and international efforts to improve information access, influence information policy, and facilitate the scholarly communication process.

In pursuit of its mission, the Library endorses the following undertakings:

I. The provision of the best possible service for the Library's primary as well as our extended clientele, a commitment which includes speedy access to information wherever it resides, in whatever format it appears.

II. The logical design and continued development of the Brown University Library collections, in keeping with the strengths of the past, the academic and research needs of the present, and the foundation which must be established for the future.

III. The preservation and conservation of the Brown University Library collections for use by generations of scholars to come.

IV. The creation and maintenance of appropriate physical facilities for materials storage and service, as well as comfortable and efficient reader study and staff space.

V. The devotion of resources, both human and material, to the raising of outside funds and to the publicizing of the Library's rich and varied collections, for the purpose of supporting continued, significant improvement in Library collections, facilities, and services.

	This vision requires the following settings, capabilities, or resources:	**Actions necessary to establish settings, capabilities, or resources:**
1. The "virtual library" will become a reality for every member of the Brown University Community.	Faculty, students and staff have convenient access to workstations with "windows" capacity, so that multiple sources of information can be consulted simultaneously. Print, visual and sound information is accessible conveniently through one menu on one's personal workstation. One user-friendly interface allows the individual to search the CWIS, Josiah, the Electronic Library, and outside information sources. Users may receive published information not owned by Brown in a variety of ways, through traditional ILL, document delivery, or digital transmission to a personal workstation. The Library provides online access to all relevant scholarly information regardless of format and location, including finding aids for Internet resources.	CIS and the Library commit to "one-stop shopping" and agree on a plan to make such access possible. Develop specific plans for renovating/upgrading of Library space to provide the best environment for managing and using "the virtual library." Acquire, maintain and replace equipment which is essential in supporting an online, multimedia, interactive environment.
	Assistance with non-bibliographic online data is available to users in the Humanities and Physical and Natural Sciences, as well as to those in Social Sciences. All retrospective conversion is completed as of 1996. By the year 2000, Government Documents, East Asian holdings, Media Services, and Art Slide collections, and information sources on campus not owned by the Library, are accessible through Josiah.	Develop specific plans for adding other campus information resources to Josiah or CWIS. Develop specific plans for adding Government Documents, East Asian, Art Slide and MS Colls. to Josiah. Continue work to expand Social Science Data Services.
	The Innopac project is completed and all modules are operational by the Fall of 1996. Journal Tables-of-contents services are easily accessible and linked with the Josiah Serials Control module.	Implementation of all Innopac modules initially purchased remains a Library priority until work is completed. Additional Innopac modules are prioritized and acquired as funds permit. Re-examine workflow, after Innopac, in order to use staff more effectively.
	Within the provisions of copyright law, the Library can scan items in the collection for preservation or service purposes. Reserve lists and similar services are provided via the network.	Participate as appropriate in pilot or model projects involving copyright, electronic publishing, scanning, etc. Take steps to become aware of "cutting edge" experimentation with information technology going on in other institutions; utilize what was learned (e.g., Cornell research in digitization); Through national organizations such as ARL, RLG, ALA, etc., work with publishers and other appropriate parties to find a solution to existing copyright concerns.

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2. Library facilities will be fully adequate for preservation housing of the collections, regardless of format, and for operation and use of the "virtual library."	**This vision requires the following settings, capabilities, or resources:** Every staff member has a fully functional, multi-format workstation on his/her desk or conveniently accessible.	**Action necessary to establish settings, capabilities, or resources:** Develop time-table, priority lists, and cost estimate for adding workstations and other necessary furniture or equipment to staff areas.
	Reference desks in the Rockefeller and Sciences Libraries are renovated to 21st Century standards, with up-to-date equipment and staff who have both traditional and technical skills. Staff areas are reconfigured to reflect changes brought about by the integrated system (Innopac). Faculty studies, student carrels, and other key user areas in the libraries are wired for convenient accessibility to full text, visual, sound, and numeric data. The Library has appropriate furniture and equipment for the housing and utilization of collections, regardless of format. There is a sophisticated facility on campus for the housing, viewing, and network-based transmission of visual media, including slides.	Develop specific plans for renovation of library facilities, with cost estimates which can be transmitted to the Administration and to Development.
	The Library's facilities are environmentally comfortable and convenient for users and staff and provide acceptable conditions for the preservation housing of the collections, regardless of format.	Develop mechanisms for establishing better routine communication with Plant Operations. Improve fire prevention and temperature and humidity control in library buildings; investigate feasibility of acquiring protective treatment for fluorescent lights stack areas. Examine obstacles to efficient use of facilities such as oversize shelving systems, poor or non-existent signage, etc.
	The Library operates its own onsite storage facility or participates in a joint regional facility.	Continue work toward onsite storage facility. Reactivate discussion with ARL/NE Directors about cooperative storage facilities.
	Endangered library materials are preserved on an ongoing basis, taking advantage of both old and new technologies (and including both content-based and artifactual conservation).	Continue participation in RLG Preservation Program, taking part in joint, grant-funded projects as appropriate. Initiate preservation grant proposals independently (e.g., not as part of consortium). Initiate systematic preservation treatment for the collection as appropriate through base budget funding.

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3. The Information Resources budget, as broadly defined, will be adequate to meet the priority and research programs active at Brown University and to maintain the strength of existing collections of record. It will be flexible enough to cover inter-disciplinary requirements and to respond to the demands of emerging fields. The Information Resources budget will include funds for the outright purchase of scholarly materials in all formats, as well as funds to support document delivery and other access initiatives.	**This vision requires the following settings, capabilities, or resources:**	**Action necessary to establish settings, capabilities, or resources:**
	The University commits to the idea of providing Information Resources funding at a consistent, reliable level, in balance with the academic programs which it intends to support and in recognition of the changing nature of scholarly information. The University builds on its strengths in electronic information and invests in projects determined to be a priority. Library fundraising remains a University priority, and funds raised for Information Resources funding are budgeted as incremental to routine University support.	Continue discussions with the University Administration concerning the University's philosophy of Information Resources funding as it relates to fundraising, academic planning, etc. Articulate the broadest possible interpretation of the Information Resources budget to University administration, staff and users.
	Information Resources funds are administered in as flexible a way as possible, to facilitate access by Brown students and faculty to the "virtual library."	When appropriate, continue to reallocate funds from outright purchase to access initiatives. Use "focus groups" of faculty and student users to advise on collection development activities and access services. Incorporate the effectiveness of "access" programs into our evaluation of how well the Library supports a given academic discipline.
	The Information Resources budget is adjusted in keeping with new programs as they are established.	Develop new approaches for linking "library impact" to the creation of new academic programs.
	Collection Development librarians have scholarly expertise sufficient to develop research collections in full cooperation with faculty.	Collection Development librarians have advanced degrees, specialist skills, and/or develop their academic expertise through continuing education, staff development programs, and interaction with faculty.
	The Information Resources budget is simplified, and the manner of its apportionment made less complex.	Examine the current effectiveness of the allocation system and make recommendations for improvement.

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	This vision requires the following settings, capabilities, or resources:	**Action necessary to establish settings, capabilities, or resources:**
4. The Brown University Library staff will continue to have the skills and flexibility required to: develop the collections in the manner most consonant with the curricular and research needs of current users, the strengths established in the past, and the future; process and provide access to those collections in the most expeditious and cost-effective manner; and provide sophisticated assistance to users at all levels, using information resources both available in Brown collections, through the Internet, and in the collections of other institutions.	Existing staff positions and assignments are routinely reviewed in the light of changing workflow, technologies, and institutional priorities. Library organization is reviewed in the light of the implementation of an integrated system and changing information age technologies. Job flexibility be increased to permit use of "SWAT" teams to address short-term increases in work flow, as well as worksharing across organizational lines. CIS and the Library share the responsibility for the provision and staffing of some services.	Re-evaluate the Department Heads Council for current effectiveness. Encourage experimentation with new ways of providing service, handling collection development, or providing access to collections, for example "contracting out" when possible. Initiate planning for formal organizational study as Innopac project draws to a close. Re-examine traditional means of cataloging: consider new approaches, such as contract cataloging for certain materials.
	The Library finds additional resources to invest in staff development, training, and when necessary, re-training. Computer assisted instruction (for the use of new information resources) be available for staff and users, as appropriate.	Develop a clear set of goals for a Staff Development Program. Identify priorities for staff development and training and invest resources to support these priorities.
	All Library administrators convey to staff the concept of "change as a constant" in the 20th Century library. All staff members are aware of, and participate in, the Library's service and educational mission.	Consider the creation of Quality Circles to widen staff involvement in evaluating and improving library function and services (for example, staff responsible for Rockefeller Library service units). Further empower Department Heads to take central, ongoing, responsibility for designated projects once they have been discussed and evaluated by appropriate staff and approved in principle by the Library Administration. Develop a Library Mission Statement which can be made available to Library staff at all levels and which can be distributed to campus and to other institutions
	Librarians develop their professional skills in keeping with rapid changes in information technology, library organization and services, and the production of scholarly information.	Encourage all professional librarians to strengthen their subject or technical skills a variety of ways, for example: earning an advanced degree in a subject-based discipline; developing expertise in a foreign language, computer science, or management; taking continuing education courses at Brown or elsewhere.

STRATEGIC PLAN
GENERAL LIBRARIES

MISSION

The mission of Emory's General Libraries is to support the University's teaching and research programs as well as scholarly research and resource sharing within the broader research community. The libraries fulfill this mission by providing timely access to information in a range of formats from print to multimedia either on site or accessed from remote locations within the networked environment.

VISION

Impact of Technology. Computer and telecommunication technologies have brought about significant changes in the ways that libraries operate. Although libraries have been using computer technology for operations, such as cataloging, acquisitions, and circulation control for close to twenty years, only in recent years has information been distributed more widely in a variety of electronic formats. Now, research libraries rely heavily on computer technology, networks, and multimedia to provide and distribute information to users.

The services provided by libraries and university computer centers have become so intertwined that it is difficult to say where the one ends and the other begins. As the former director of libraries at the University of Michigan commented, "The Library and the computing center. . . find themselves charged with providing information support that neither can give well without the other." [1]

The impact of technology on the library is only part of the picture. Its impact on **the education process** as a whole will likely be enormous. Stanford University President Gerhard Casper is only one of a number of university administrators expressing the strong belief that the latest technology will transform both the content and delivery of higher education to an extent not yet fully understood or appreciated.[2] In playing such a central role in providing information support, libraries need to be part of large-scale planning efforts to integrate technology effectively into the teaching and research activities of institutions of higher education.

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[1] Richard Dougherty.

[2] *Chronicle of Higher Education*, April 27, 1994.

An Integrated Service Model for Effective Information Support. Building on the growing convergence of computing centers and libraries, we expect to bring together the services of the General Libraries, academic computing, and multimedia to provide an integrated service environment. We see this as a way of most effectively supporting user information needs, no matter how the need is met, whether the information is delivered from a remote source over the network, from print collections on site, from a compact disc on a local server, or from a tape loaded on the University's mainframe computer. Bringing together the rich and varied expertise of our staffs, located in the midst of the newest technology, and surrounded by print and archival material as well, is key to a new level of excellence in information support for Emory users.

Links Between Print and Electronic Information Sources. While fully utilizing technology and a range of newer formats, scholars cannot ignore the wealth of print resources and other valuable archival and manuscript material; librarians must develop links between the old and the new, the print and the electronic. Librarians need to find ways to link the rich print, manuscript, electronic, and multimedia resources through the expertise of staff and instructional programs of all kinds in order to provide quality support for teaching and research.

An Opportunity for Quality Library Support of Graduate and Research Programs. New technology, electronic sources, and national and global networking capabilities greatly expand the reach and access to information for all libraries. For Emory, they afford a wonderful opportunity to provide high quality library support, which might not have been possible following the traditional pathways. Without the long history of rich, in-depth print collections, acquired over many decades or even centuries, Emory's swift and dramatic emergence in the last fifteen years into a national university with increasing focus on graduate and research programs has posed enormous challenges for the General Libraries.

Trying to keep up with current publications, let alone trying to purchase large collections of retrospective material in this day and age is almost impossible, even for the largest and wealthiest research universities. Why is this so? Extraordinary inflation of more than 108% for journals and 46% for books over the last six years, from 1986 to 1993;[3] the staggering quantity of close to 700,000 new titles published annually world-wide; foreign exchange rates which place the U.S. dollar at a distinct disadvantage in the overseas market where more than 40 per cent of our new material is purchased; the deterioration of print collections and the necessary but costly preservation efforts; and funding new technology all have had major financial impact on research libraries. That is why the General Libraries are seizing the opportunity to build a new kind of library support structure for meeting Emory's needs.

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[3] See attached Table for book and journal costs in ARL Libraries, 1986-1993 and Impact on Number of Items Purchased.

More Active Role for Librarians. Working in the electronic environment, we envision a more active role for librarians teaching users to navigate the complex networks and sophisticated information sources. Librarians will work more closely with faculty, helping them to understand the vast array of sources available in all formats and how to access and effectively search or use them. We see a closer working relationship with scholars emerging, perhaps more closely resembling ways that the Special Collections librarians assist users to access manuscript and archival material.

Laboratory for Projects. We see the need for conducting ongoing research projects within the walls of the library in order to create a better understanding of what is required to operate fully in the electronic information environment. There are so many complex issues, not the least of these being intellectual property rights, an area in which we hope to participate in a pilot project this coming academic year. Some of the projects will raise issues of interest for educators as they consider ways of re-shaping programs of study for librarians of the future, an area much in need of attention.

In using networked information, it is important to develop standardized ways of authenticating information sources to assure the integrity and authenticity of information as originally recorded. How do I know that the document I have found is the same one that was cited in a footnote? How do I know that what I am using now has not changed since the last time I used it? We also need to concern ourselves about mechanisms for determining who will assume responsibility for preserving research material in the newer formats, who will store and archive the material and just as important, how to do it. Will the software and hardware be available in future years to access it or do we need to convert electronic information on a regular basis? Since library and information management schools have not been doing this kind of research, libraries will need to take the lead. Everyday operational units can serve as excellent laboratories for testing findings and results of the studies.

Collaboration Among Libraries Is Essential. Collaboration and partnerships are key to effective utilization and access to information in the networked environment. Emory has been in serious discussions about collaborative efforts with Yale and Harvard as well as with libraries in the Atlanta area. We have worked with the University of Georgia, Georgia Tech, and Georgia State, in sharing databases, delivering information electronically, and playing a leadership role in acquiring grant funding for assisting Georgia libraries to enter holdings records of major archival/manuscript collections into the national database, the Research Libraries Information Network (RLIN).

For the success of Emory's emphasis on electronic access to information, we clearly also need partnerships with research libraries that have strong print collections. The scholar's need, for many years to come, to access historically rich print collections cannot be underestimated. Currently, the amount of full-text material available electronically is relatively small but varies widely by discipline. In supporting some areas in the sciences and in business-related subjects, for example, we can rely heavily on electronic-based information, but in other disciplines, the amount of information available electronically is minimal. In order to digitize substantial bodies of retrospective print material, research libraries will probably have to take the lead and work together on grant-funded collaborative projects. It should also be noted that many parts of the world, outside the U.S. and Europe, lack appropriate levels of technology to produce and distribute information in electronic formats; they continue to publish great quantities of print material and will probably do so for years to come.

Planning a Virtual Library: the Luce Grant. While most libraries are currently utilizing electronic information in a variety of ways, Emory's General Libraries have the benefit of a planning grant from the Luce Foundation to support our planning efforts. The grant is for exploring and articulating what a fully functioning virtual library (often referred to as a digital library or electronic library) really means. What does it require to operate fully and interact with other libraries, sharing resources and accessing information over networks?

The concept of the virtual national library is the belief that through the powers of computer and telecommunication technologies, the libraries of the nation, and eventually the world, will be linked to one another in such a way that faculty and students may have access to information in any format quickly and at reasonable cost, without regard to where the information physically is located. To create a virtual national library involves addressing many complex governance, organizational, legal, economic, technical, and educational issues. Its very essence is collaboration and mutuality of benefit, which is not easy to achieve. We have been in conversations with Harvard and Yale about working together in this planning effort and will explore other possible partnerships. As a medium-sized research library, Emory has much to offer in a partnership. Emory has the flexibility to experiment in ways that the very large libraries cannot do, carrying as they do the weight and responsibility of maintaining great print collections.

Library as Place: the Woodruff Library Addition as Cornerstone of New Kind of Library. Even though we emphasize and envision students and scholars doing considerable work from the desktop in a variety of convenient locations to which we distribute information, the library remains and will remain important as a place. Indeed, the planned Woodruff addition is the cornerstone of our efforts to make the research library of tomorrow a reality. We are currently in a period of intensive work with the architects to design a facility responsive to the needs of providing integrated services, with heavy emphasis on network access. The process involves shaping the space to accommodate appropriate staff and their varied expertise and needs, print collections, workstations, power supplies, and networking requirements. It will be a place to bring together the expertise of the staff with the most advanced equipment and connectivity; it will be a place for experimental work with new technology; it will be the place for staff/faculty/student collaboration on instructional programs and research projects to improve the delivery, storage, and preservation of information and to reduce costs. The proposed Chemistry/Physics Library will also serve as a place for providing state of the art services to the science community. **The library will continue to exercise an essential and distinctive role as a place for researchers, students, and staff to come together and interact in a unique learning environment, a role that cannot be overestimated in value.**

Commitment to Renewal: A Strategic Plan for the Harvard College Library

FOREWORD

This strategic plan is one of the principal products of the College Library's planning process which dominated the life of the library during the 1990-91 academic year. The other product was the process itself which stimulated new thinking and focused the attention of the faculty and administration on the library's current problems and future needs and opportunities. Nearly every member of the library staff was involved in the planning process either directly or indirectly, and many of them made extraordinary contributions as members of the five task forces that provided the substance of this plan. Faculty consultation was extensive. Nearly a hundred faculty members participated in a series of Faculty Interest Group meetings and many others were involved as "faculty liaisons" to advise and assist in the projects involving the transfer of books to the Harvard Depository. Still others served as members of the FAS Library Committee and the Strategic Planning Advisory Committee. The input of students was obtained through a series of meetings with various student committees and groups.

The planning process was guided and conducted from start to finish by Barbara S. Graham, Assistant Director for Financial Planning and Special Projects in the University Library. Lawrence Dowler, Associate Librarian of Harvard College for Public Services, was responsible for analyzing and organizing the mass of data and ideas that were generated by the planning process and for drafting the text of the plan. The Director of the University Library, Sidney Verba, and the Acting Director, Christoph Wolff, provided advice, counsel, and support throughout the planning process.

The plan is strategic. It gives an overview of the external developments that are forcing the library to change the way it fulfills its mission as it makes the transition from the industrial to the information age. This is followed by a description of the five strategic areas and goals that the library will focus on in the 1990s along with the specific objectives that will be pursued to achieve those goals. By design the plan omits discussion of the tactics of implementation. Implementation will be dealt with in other documents and in the operational environment. The mission statements in the Appendices were drafted during an initial retreat of senior librarians that launched the process.

In addition to the strategic plan, and final (unpublished) reports by the five strategic planning Task Forces, three other significant reports were generated by the planning process and distributed widely:

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New Beginnings: A Report to the Faculty of Arts and Sciences on the State of the Library, by Richard De Gennaro (2/1/91);

Strategies for Achieving Balance in the Use and Storage of Library Materials, by Lawrence Dowler (2/9/91);

Collection Development and Cataloging Restructuring Group, Final Report, by Lynne Schmelz-Keil, Chair (6/24/91).

The strategic planning process itself is extensively documented in four reports which were published in *Harvard Library Notes* and summarized in the Spring 1991 issue of the *Harvard Librarian*. Copies are available on request from the Harvard University Library Publications Office.

A $100,000 planning grant from the Council on Library Resources, made jointly to the College and University libraries funded in part the College Library's planning effort in addition to another initiative with a University Library-wide focus. We gratefully acknowledge that assistance.

Richard De Gennaro
Roy E. Larsen Librarian
Harvard College

I. THE LIBRARY IN TRANSITION

"If we want things to stay as they are, things will have to change."
Giuseppe Di Lampedusa, *The Leopard*

Institutions are often the product of a formative idea. The extent to which an institution is successful depends on the degree to which it is guided by this idea and its underlying principles and assumptions. For nearly a century, the Harvard College Library has been guided by a vision that has made it one of the preeminent research libraries in the world. But faithful adherence to principles that result in success in one era cannot guarantee continued success in another. The enormous growth in the quantity and kinds of research materials, escalating publication costs, the introduction of new technologies, changing patterns of research and instruction, and finite resources have undermined the assumptions of the past and prompted the library to seek a new vision and a strategy for achieving it.

The Harvard College Library has operated on the principle that a significant representation of human knowledge ought to be housed in the library in close proximity to the students and scholars who use it. One learns, it was and still is believed, through contact with books. Assembling great collections of books and providing convenient access to them for browsing and use in open stacks became the hallmark of Harvard's libraries. Extraordinary collections—not just in the arts and letters, but a broad range of historical materials that record the variety of human experience and institutions—would nourish research in nearly every area of scholarly interest; this was the foundation upon which Harvard's academic program rested and was both a contribution to and a consequence of this vision. The product of this idea, embodied in the Widener Library, has been a beacon to faculty and students and has been a key to the success of Harvard University.

By the end of the Second World War, forces of change began to threaten the principles and assumptions that had so successfully guided the library in the past. Seventy years ago, the quantity of publications was relatively finite and a library might aspire to acquire a significant portion of it. As the collection grew, however, parts of the central collection were moved from Widener to sites near academic departments, for example, music and fine arts, ultimately creating a complex of eleven libraries and two storage facilities that now constitute the Harvard College Library.[1] The gradual dispersion of books out of Widener, although improving access for some, also diminished the integrity of the collection and the ability to browse among related materials in one location. Dispersing the collection necessitated greater attention to cataloging, not only as a means for locating needed materials, but as a way of maintaining the intellectual integrity of the collection in the absence of a single physical location. In spite of these measures, the library has continued to face chronic shortages of space. Cataloging has failed to keep pace with the rate of new acquisitions. Services are inadequate, even as the collection has become more difficult to use. In sum, the library is now operating in a new environment that challenges the very assumptions and practices that have been so successful in the past.

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[1] Cabot Science Library, Fine Arts Library, Harvard-Yenching Library, Hilles Library, Houghton Library, Kummel Library of the Geological Sciences, Lamont Library, Littauer Library, Loeb Music Library, Tozzer Library, and Widener Library.

The cost of publications, especially journals, has escalated dramatically. Journal prices have risen by 400 percent in the past twenty years and by almost forty percent in the past five; currently, price inflation is twenty to thirty percent annually, with no end in sight. Foreign publications, which represent approximately sixty percent of the library's acquisitions, are of course also affected by exchange rates. Rising costs of publications are a reflection of the usual economic forces, but they may also indicate a more troubling phenomenon. Information in its various forms is increasingly viewed as a commodity that has economic value and can be priced accordingly. As a commodity, information will be subject to market, rather than academic values, further eroding the library's ability to provide these resources; worse, it could place a means test on access to some information in the future.

The quantity of published material continues to increase. Approximately 850,000 books are currently published annually throughout the world, and this number is increasing by about 2.5 percent each year. The reasons for increasing publications are complex and varied; suffice it to say that publications mirror the cultural diversity and increasing pluralization of modern societies. The continued increase in publications, coupled with escalating prices, has resulted in a declining percentage of the published output research libraries are able to acquire.

It is not just the quantity and cost of research materials that is daunting to libraries, it is also the variety of forms of research material. Still and motion pictures, taped interviews, statistical data, ephemeral and unpublished reports and conference proceedings, manuscripts and archival collections, artifacts, and electronic information in a variety of formats are increasingly important for research, and libraries are compelled to acquire them.

The Harvard College Library, like most libraries, has a chronic space problem. Widener Library is now full, 700,000 volumes over the number the building can hold and still permit effective use, preservation, and servicing of the collection. Moreover, the Widener collection is growing by more than 100,000 volumes a year; failure to solve the space crisis in Widener and other units in the College Library, which are also running out of space, will prevent the library from carrying out the goals and objectives outlined in this plan. The recent decision to transfer approximately one million volumes over the next three or four years to the Harvard Depository and to use this facility for future collection growth is critical to the future success of the Harvard College Library. But transferring large quantities of material to closed stacks will require the library to improve services and enhance intellectual access in order to offset the disadvantages of diminished proximity to the collection. Most of all, it will require a new understanding of the nature and purpose of the library that looks to the future, not the past; a library that will not only permit students and faculty to do their work, but will actually enhance their capacity for doing so.

Research in the humanities and social sciences, as well as the sciences, has undergone significant change over the past three decades. The quantitative methods of social scientists are more evident, even in the humanities, and social and demographic changes have encouraged scholars to put greater emphasis on expressions of everyday life—social and cultural history, studies of women and families, popular culture, and public perceptions and beliefs about a variety of issues. Scholars engaged in interdisciplinary and cross-cultural research tend to ask questions that are not easily satisfied by traditional library cataloging and classification schemes, and they also contribute to greater use of certain research materials, such as images, artifacts, popular literature, ephemeral and other nonprint sources. The effect of changes in research requires libraries not only to expand the scope of what they acquire, but also to pay closer attention to the forms of intellectual access they provide and to upgrade services so that research materials can be used effectively.

One of the unacknowledged consequences of these new patterns of research is that academic departments do not always reflect the research interests of their members. Instead, individual scholars are linked across departments into small communities of scholars, drawn to one another by shared research interests into an invisible college not reflected in the departmental structure of the university. Moreover, this research tends to be part of a national system of research; the invisible college embraces national and even international communities of scholars, for whom automation and new technologies will become increasingly important for purposes of scholarly communication. Indeed, one of the primary benefits of technology is the increased viability of research done by geographically isolated researchers who will be connected together by high-speed networks.

There are a growing number of scholars for whom research has changed appreciably as a result of new technologies. For some disciplines and for some individual scholars, technology has made research more efficient, but has had only limited impact on the kind of research they do; for others, however, particularly in the sciences and social sciences, the nature of research is being significantly altered because technology makes it possible to explore issues that could not otherwise be investigated. The analysis of census data by a political scientist or a citation study of words in literary texts are indicative of the kinds of scholarship possible with computer applications. Both cases have implications for a library whose excellence derives primarily from the size and richness of its collections. The challenge is to devise a strategy that will enable it to continue to build, catalog, secure, preserve, and maintain the resources it has already acquired, while, at the same time, it commits resources to support new technologies. Striking a balance between the promise of an uncertain future without foreclosing on the certainties of the past will be one of the most difficult challenges facing the library.

Over the last decade, the cost of operating the average college and university has risen twenty-three percent faster than the rate of inflation, prompting many universities to defer maintenance on buildings or call upon reserves and endowment for operating funds. Tuition and fees have risen even more rapidly, in fact, twice as fast as inflation, and account for an ever higher proportion of university budgets. During the past ten years, government funding of higher education has fallen by six percent and prospects for the future are not promising. State spending, especially in the northeast, is down dramatically and now stands at a thirty-year low. Many universities have responded to the financial plight of the middle class by moderating tuition increases and increasing financial aid to students, thereby reducing their ability to introduce new courses and academic programs.

The Faculty of Arts and Sciences has not been immune to these economic forces. Last year the FAS had a deficit of over $10 million. Measures are being taken to reduce the deficit, but there are indications that the FAS budget will remain susceptible to deficits until the base budget is reduced. The Harvard College Library has the largest subvention of any department and has received average increases of ten percent a year during the past decade, but such increases will not continue.

Moreover, total library costs are expected to continue to rise for the foreseeable future. Thus one of the challenges confronting the library will be to develop a strategy for supporting teaching and research while maintaining expenses at a sustainable level.

II. Creating the Future from the Past: A New Vision of the Library

> *"The future is purchased by the present. . . . It is not possible to secure distant or permanent happiness but by the forbearance of some immediate gratification."*
> — Samuel Johnson, *The Rambler, no.78*

The fundamental purpose of the library is, as it always has been, to support research and instruction in the college and university and the research of scholars from around the world. It is not enough for the library simply to accommodate inevitable change. Rather, it must be responsive to new conditions, while preserving the distinctive and useful features of the past. Maintaining a browsable, open-stack collection and striking a balance between old and new books are examples of the latter; improving library services and providing more congenial spaces for the use of library materials illustrate the former. The library's challenge in this period of transition is to devise a strategy that retains the best of the past while creating an organization that is responsive to change and provides leadership in shaping the future. What are needed are a coherent vision and principles to enable the library to chart this course.

The library, as someone once observed, is not a building, but the collection inside. In truth, the library is not just a collection, either; it is also an association of people who come together to do something that cannot easily be done alone. As an association of people organized by functions—collecting, cataloging, services—the library is dedicated to supporting research and instruction. Its purpose and goals are, in one sense, dependent on the purpose and goals of the larger community, the *universitas*, of which it is a part.

The associative nature of the library suggests four principles that ought to govern the library in the future. These principles are: unity of vision, stewardship, quality, and collective action and cooperation.

The business of the library is communication of information—printed, aural, visual, and electronic—and it is the library's support of scholarly communication that provides the glue that binds and connects the various parts of the community to the whole. To be effective in its mission to support the diverse academic programs of the university, the library must create a shared vision. The key to success will be the creation in fact, as well as in name, of a unified Harvard College Library that supports all of the scholarly fields we are committed to serving.

The second principle of the library as association is stewardship. A steward is one who manages on behalf of the community; the steward neither owns the content nor the specific functions for which he or she is responsible. Stewardship involves two ideas: the conservation of existing resources, including collections, staff, and space, through planned change, and the acceleration of conscious change in the areas of technology, services, and intellectual access to maintain and even increase the quality of support for learning. Stewardship represents, therefore, both the husbanding of existing resources that are essential to the academic community and a deliberate effort to introduce new sources of information and services that will become increasingly important in the future. Within the Harvard context, stewardship entails: (1) selecting the materials and sources needed for instruction and research; (2) managing the collection, that is, maintaining, preserving, cataloging, and servicing the materials acquired; (3) improving intellectual access by making it easier for the user to discover the full range of research materials, nonprint sources, as well as books held in storage; (4) providing training and instruction in locating needed information and using library resources with the aim of helping users to become self-sufficient; and (5) developing new skills for staff, who ultimately determine the quality of the library.

A community also calls for an unusual commitment to quality and excellence in performing the functions that define it. Devotion to quality is not a function of perfection; instead, it derives from a recognition that the success of the whole is dependent on the quality of contribution of each part and requires, therefore, constant attention to process and procedures. Moreover, a commitment to quality will encourage the participation of staff at all levels and functions in determining the most effective and efficient methods for operating the library. This is the surest antidote to unfettered bureaucracy.

Finally, the new vision of the library calls for collective action and collaboration. The library's mission to support research and instruction can no longer be entirely satisfied locally; future success will depend upon collective action within the Harvard community and active collaboration with national and international research institutions and libraries. Collection development and storage, electronic transmission of information, preservation, intellectual access, and the development of standards for new technologies are a few of the areas in which the Harvard community can benefit from cooperative efforts with others.

III. STRATEGIC GOALS AND OBJECTIVES

"I skate to where I think the puck will be."
—Wayne Gretzky

The library will focus on five strategic goals during the 1990s. These are: space and catalog conversion, collections and access, library use and services, reallocation of resources, and new technologies.

1. SPACE AND CATALOG CONVERSION

The acute shortage of space for books is the most urgent problem confronting the College Library. Failure to resolve this issue will undermine day-to-day operations and jeopardize our ability to achieve the goals and objectives of the Strategic Plan. The solution to the library's space needs is the Harvard Depository. What the Harvard Depository provides, in addition to secure and climate-controlled stacks, is adequate shelf space for the foreseeable future. The transfer of materials to the Harvard Depository also presents an opportunity—indeed, it requires us—to reconsider the purposes and uses of Widener and the other College libraries during this period of intellectual and technological change. But solving the space problem depends not only on the availability of the Harvard Depository, it depends as well on the effective use of the Harvard Online Library Information System (HOLLIS). More than just a computerized version of the card catalog, HOLLIS is a powerful and versatile management system that facilitates the transfer of materials between libraries and the Harvard Depository. Unfortunately, only one-third of the library's catalog records are represented in HOLLIS, and this is a serious impediment to its use. Operating a library system that is only partially computerized is inefficient since users and staff must work with two systems. To make HOLLIS a fully effective public catalog and an efficient management system, all the remaining pre-1976 catalog records must be converted to machine-readable form and made available in HOLLIS. Thus, retrospective conversion of the card catalog is a high priority because it will permit the effective use of the Harvard Depository to solve the library's space problem, even as it significantly improves scholarly access to all of Harvard's collections.

Strategic Goal: Provide for growth of collections by converting the card catalog to machine-readable form, enabling the most effective use of closed-stack storage at the Harvard Depository and in the Yard.

We will pursue two objectives to achieve this goal:

1. *Define and create the on-site collection. Balance collection growth and existing space in the Yard by moving one million volumes from Widener and develop and implement a plan that will enable the library to maintain a steady state of growth in the Yard.*

   Widener and nearly all of the other ten libraries in the College Library are filled to or beyond their working capacity. The College Library has a total of nearly seven million volumes and adds about 150,000 volumes a year. At the current growth rate, it will double in size in twenty-five years. We have a solution to this problem in the Harvard Depository, a state-of-the-art closed-stack facility for books and other research materials, located at Southborough, thirty-five minutes from Cambridge. Each unit has a capacity of approximately two million volumes (more than half the capacity of Widener/Pusey), and there is room for ten units. Materials are stored in secure, climate-controlled space, and are delivered the next day. In addition, more intensive use must be made of existing stack space in the Yard. By employing compact storage technology, the amount of browsable, open-stack space in the yard can be increased. The success of these efforts will ultimately depend on our ability to develop a comprehensive collection-use plan that identifies which books need to be consulted on-site and which books can be retrieved from closed stacks. Librarians and faculty will need to achieve consensus on what to send to storage and how best to use valuable library space in the Yard.

2. *Catalog conversion. Convert the library's card catalogs to machine-readable form and make them available in HOLLIS.*

   The retrospective conversion of pre-1976 catalog records is the single most important measure we can take, not only to improve intellectual access to Harvard's collections, but, equally important, to facilitate the transfer of materials between Widener and the Harvard Depository. To make HOLLIS a fully effective public catalog and library management system, all the remaining pre-1976 catalog records must be converted to machine-readable form and made available on HOLLIS. Preliminary estimates put the number of records to be converted in the College Library's catalogs at 3.5 million (nearly five million records for the entire university). Completion of this project will facilitate access to the library's older and most important research collections.

2. Collections and Access

The dramatic escalation in the cost, quantity, and forms of research material will affect the library's ability to maintain traditional collection practices. Great research collections, it is now recognized, demand the commitment of resources not only to build collections, but also to manage and preserve them. In the past, we were inclined to think of the collection as the material owned by a library. A better definition of collection is one based on the principle of stewardship or collection management, that is, selection, acquisitions, cataloging, preservation, security, maintenance, and services; these are the real costs of acquiring a book and building a collection. Moreover, as the library continues to build and manage the collection, it must also provide resources for new services and technologies, which will be increasingly important for research. Indeed, the electronic transmission of texts and images will transform our understanding of research collections and change, too, library functions that are needed to support them. To meet these new instructional and research needs, informational services will need to be tailored. An unacknowledged problem resulting from these changes is how to find what is needed from information sources that seem to be increasing geometrically. The explosion of information sources and the success of libraries in making it accessible threatens to overwhelm students and scholars; a challenge for the library will be to devise ways to help users navigate this sea of information and find what they need in the form in which they need it. The greatest hope for a solution to this dilemma may be technology, but, in the near term, reference librarians will be severely tested.

Strategic Goal: Strengthen the research collection by sustaining acquisitions and improving intellectual access, preservation, security, and maintenance of the collection.

The following four objectives are designed to achieve this goal:

1. *Ensuring the future of collections. Maintain the strength of the library's traditional book and journal collections and enrich them with new types of material—including visual, electronic, and multi-media formats—by increasing endowment funds.*

   The new information technologies will increase greatly the quantity and range of research resources available to library users, but they are no substitute for continuing to build strong traditional collections and services. The library's book, journal, and manuscript collections are and will continue to be the mainstay of our library and its services to users through this decade and the next. We cannot build our new computer-based information capabilities at the expense of our traditional collections and services; we must do both. At the same time, the continued growth in the quantity of publications and escalating costs will oblige the library to devise methods to evaluate the quality of acquisitions, reduce inappropriate duplication, and promote cooperative collection development agreements. We must also seek to balance the collecting and processing of research materials and alter the methods for processing and storing collections in order to support acquisitions within existing on-campus space and, through more efficient operations, with fewer staff members.

2. *Improving intellectual access to research materials. Complete the retrospective conversion of the card catalog and strengthen intellectual access by introducing new databases to HOLLIS, devising better cataloging methods, and developing the subject skills of library staff who help students and scholars to locate needed information and sources.*

The retrospective conversion of pre-1976 catalog records is clearly the single most important measure we can take to improve intellectual access to Harvard's collections and to make HOLLIS a fully effective public catalog. The library has an enormous investment in its collections; recording them in HOLLIS will ensure that important materials are not overlooked. An online catalog is simply a more efficient means of finding bibliographic information. Boolean search strategies are more powerful than the traditional card catalog. Adding reference works, abstracts and indexes, text and a variety of other informational databases to the "catalog" will transform the catalog into a cultural database; it will also increase the efficiency of doing research and change the very process by which scholars create and use information. These changes to the traditional structure of the catalog, coupled with changes in the methods and use of research collections, will require librarians to re-examine cataloging principles and traditional methods of providing intellectual access to research materials. The need to improve intellectual access to research materials, as well as the need to contain costs, will fundamentally alter traditional descriptive practices and the work of librarians in the future. Finally, to assist researchers in navigating an increasingly complex universe of information, the library must seek to identify and develop staff with subject expertise and make this expertise more readily available to students and scholars. To do this, more members of the library's staff will have multiple responsibilities that cut across the lines separating traditional library functions. Improved interaction between scholars and librarians will help users to be better informed about the sources they need and librarians to be better informed about the research needs of students and scholars. In the long run, the aim is to relate collections and services to the research agendas of specific disciplines by developing discipline-competent teams within the library to address users' needs.

3. *Preserving collections through climate controls. Install air conditioning, new lighting, and security in Widener Library, and renovate and improve the climate control systems for Houghton, Pusey, and Lamont libraries.*

Improving the storage environment for the collections is the single most important preservation action that can be taken by Harvard. Paper degrades four times as fast at 80° F and 50 percent relative humidity (typical summer conditions) as it does when stored at 68° F and 40 percent relative humidity, and eight times as fast as the conditions currently attainable at the Harvard Depository. Moreover, excessive heat and humidity, air pollution, and exposure to the ultraviolet light that is present in natural and fluorescent light all accelerate the deterioration of research materials and cause irreversible damage. The sulfur dioxide, ozone, and nitrogen dioxide present in urban Boston and Cambridge are powerful catalysts to chemical reaction. Installing climate controls and new lighting in Widener and upgrading equipment in Pusey and Lamont are essential elements in preserving the library's collections.

4. *Preserving collections through technology. Strengthen the library's preservation program by raising endowment funds for mass deacidification, a conservation laboratory, and the preservation of research materials through microfilming and the use of imaging technologies.*

The library must find the means to preserve its collections, which are deteriorating at an alarming rate. Storing lesser-used materials in the climate-controlled Harvard Depository and dramatically improving environmental conditions in Widener will enable the library to concentrate its preservation resources on the more heavily used portions of the collection. The library must, therefore, intensify efforts to review materials for preservation decisions. We have already developed a comprehensive preservation program and are also participating in a national, federally funded preservation project. We need to endow this program, create a conservation laboratory under the direction of a professional conservator, and explore promising opportunities for using imaging technologies for preserving materials and making them accessible to users.

3. Library Use and Services

From its inception, Widener Library and, indeed, all of the libraries that comprise the Harvard College Library, were regarded not just as storehouses for books, but as the places where students and faculty worked. One of the advantages of Harvard's distributed library system is convenient physical access and the ease and efficiency with which scholars can locate and use research materials. The continued growth of the collection, however, has resulted in the dispersion of materials throughout the campus and even off-site. The loss of physical proximity to research materials makes browsing less effective and the use of materials inconvenient. Research efficiency has also been compromised by the absence of a comprehensive reference collection and the lack of a coherent organization of books, based on their predominant use, in the stacks of the central library complex. These deficiencies have prompted academic departments, primarily in the humanities, to request separate, departmental reference collections; the result of such fragmentation is further erosion in basic library services and increasing costs to FAS. In other fields, especially in the physical sciences, proximity to basic reference tools and research literature will be increasingly in electronic form, which may begin to change the informational needs of some of the faculty science libraries for support and services. The pattern of undergraduate use of libraries has also changed since Lamont Library was first conceived of as a separate library for undergraduates. Dramatic changes in publishing at the end of World War II have made instructors less reliant on textbooks. Harvard's adoption of the core curriculum may have also accelerated the increasing use of the research collections by Harvard undergraduates. The need for a high-use undergraduate collection remains, but this collection, by itself, is no longer sufficient for undergraduate learning, a fact demonstrated by the growing undergraduate use of research collections in Widener and elsewhere.

The cumulative impact of these changes in library use and services has diminished the efficiency of research by scholars and the quality of learning by students. Effective research depends not only on the availability of research sources, but also on timely access to them. As academic fields continue to develop diverse patterns of research and communication, the library must provide a growing array

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of specialized resources and services. The library will respond to this new environment by: (a) improving services and physical access to source materials; (b) expanding the reference collection and providing greater support by subject specialists; (c) developing and implementing plans for gateway libraries in Lamont and Cabot, thereby both improving undergraduate learning and creating better access to research collections for all members of the Harvard community; and (d) providing better coordination of informational services and library support for scientists at Harvard.

Strategic Goal: Help students and faculty to achieve maximum benefit from library services and resources by making use of the library more convenient and efficient.

The library will pursue three objectives to achieve this goal:

1. *Conversion of Lamont and Cabot to "gateway" libraries. Renovate, refurbish, and equip Lamont Library and incorporate programs and technology into Cabot Library to create gateway libraries that will focus on the effective use of information technology by the entire Harvard community. Advanced technology and skilled staff, dedicated to undergraduate education, will provide support for experiments in instruction, database development, and scholarly communication.*

   The idea of a gateway library is predicated on the notion that research ought to inform instruction and that interdisciplinary studies and information technologies are transforming the ways of knowing. Learning how to use electronic information effectively in a variety of formats and on networks is an increasingly important part of undergraduate education. The historic role of the library as a place to consult books and journals must be supplemented by one that incorporates emerging information technologies into a program devoted primarily to undergraduate education and that introduces students to information sources at Harvard and beyond. Recent studies suggest the importance of small group study and active class participation as key ingredients in learning. The gateway libraries should, therefore, incorporate group discussion rooms and rooms for working with various audio-visual materials, as well as multi-media workstations and individual carrels and study spaces as part of the plan. Although information technologies may soon become ubiquitous, a complete renovation of Lamont and full integration of new technologies into Cabot will enhance library services and instruction in the humanities and the sciences for the entire Harvard community. Incorporating state-of-the-art technologies and employing information specialists will provide the College with needed facilities to support: (a) the creative use of technology in teaching; (b) an instructional program at Lamont, Hilles, and Cabot to assist students and faculty in making the most effective use of HOLLIS and other research tools and library resources; and (c) experiments in teaching, creating text databases and multi-media applications, and exploring different modes of publication and scholarly communication.

2. *Library services. Improve the research use of collections in the central library by the following measures: define and enlarge the open-stack research collection, create a more convenient and useful shelving plan within Widener/Pusey, establish a secure reading room for the use of noncirculating materials, design a new space for Government Documents, Microtexts, and other nonbook collections, and greatly improve access to and the delivery of research materials directly to students and scholars.*

The library is filled beyond capacity and we can no longer view it primarily as a storage facility. In the future, the central library complex (Widener/Pusey/Lamont/Houghton) must be dedicated to the *use* of books as well as government documents, electronic databases, audio-visual materials, photographs and images, ephemera, manuscripts, and other forms of research materials, regardless of where particular items and collections may be stored. In order for this new mission to work, the library will need to devote greater attention and resources to improving services for the delivery and use of research materials. If faculty and students cannot put their hands on the materials they need, then the library has failed them. Patrons need a fully functional online reserves system that provides faculty and course list indexing. They also need a system that provides online ordering and renewal capabilities, and other interactive facilities that will be timesaving and offer a fair trade-off for reduced proximity to every item in the collection. Moreover, faculty members and librarians working together must develop a profile of the books and research materials that need to be browsable and used on-site. We must also improve the arrangement of collections in the stacks based on the relationship of classes to their primary uses. In addition, we must greatly enlarge the central reference collection and provide a separate reading room and seminar rooms for its use. Growing concern for preservation and security demand the creation of a supervised reading room in the central complex in conjunction with a photocopy service center in order to reduce damage to fragile materials and to permit the use of noncirculating materials. Finally, we will move the Government Documents and Microtext Reading Room to the first floor of Lamont to create a facility that is appropriate to its high level of use and the quality of its collections.

3. *Science libraries. Assess the informational and research needs of Harvard scientists and, in collaboration with science faculty, develop procedures for improving the coordination of library policies and services for the sciences.*

With the exception of Kummel Library of the Geological Sciences and the research collection for mathematics in Cabot Library, scientists at Harvard are served primarily by libraries administered by departments. Proximity to basic reference tools and research literature has always been extremely important to scientists and the departmental structure has worked well. The growing importance of electronic information, however, is not only changing the informational needs for some science departments, but it raises a number of issues that are also of concern to the College Library. Preservation, duplication, and the storage of older materials, for example, are important to the College Library as well as to the science libraries. The science community ought to be involved in discussions about policies concerning the library information system, including decisions about which databases are mounted in HOLLIS. Similarly, agreements with other institutions for sharing resources and providing document delivery are difficult without the participation of science departments. The libraries serving scientists must not be perceived as balkanized special interests, and the boundary between them and the College Library must not become a barrier to providing service to the scientific community. Instead, the College Library needs to achieve a better understanding of the informational and research needs of scientists in order to provide more effective library services to this part of the Harvard community. As technology begins to change research methods and library use, especially in the sciences, the College Library must encourage the participation of scientists in planning coordinated library policies and services. The Harvard College Library must develop the kind and level of library and informational support for the sciences that its distinguished programs require.

4. New Technologies

New technologies and telecommunications promise to transform scholarly communication and are already having a significant impact on academic libraries. The rapid development of national networks will make it possible to transmit huge quantities of data, text, and images from coast to coast and around the world. High-speed transmission and new computer and networking technologies will permit scholars to edit text and images; to cross-reference and link documents, independent of location; to browse online digital libraries; and to search large text and image databases and retrieve selected documents. In short, we have entered a period of extraordinary, perhaps even revolutionary, change in the way in which information is stored, packaged, transmitted, and used. Because of the strength of its collections, Harvard has a special obligation and, indeed, a unique opportunity to participate in these developments.

At present, HOLLIS is the only major information system available across the campus. Although the library is committed to providing access to the expanding universe of information through library systems and technology, it will be limited in its ability to do so by the absence of a ubiquitous campus network. Without an electronic infrastructure, students and scholars at Harvard will be severely hampered in their efforts to participate in the rapidly evolving information and telecommunications environment. Failure to address computing needs systematically and structurally throughout the university will jeopardize the library's efforts to provide access to electronic information.

Strategic Goal: Build and support computer and communication technologies and implement a comprehensive program for delivering electronic research materials in the College Library.

The library will pursue three strategic objectives:

1. *Support electronic information. Provide the infrastructure to support the use of electronic information in the library and link it to emerging campus networks.*

   The library must not only acquire the electronic sources needed for research, but also provide the infrastructure—facilities, equipment, and staff—to support a growing array of texts, databases, and other forms of electronic information. To ensure that students and faculty have maximum access to electronic information and resources, the library must develop strong partnerships with the Office for Information Technology and other campus libraries and information providers within the University. In addition to providing the equipment and network support needed for electronic information, the library must also take the lead in providing assistance and instruction in the using of these systems by students and faculty.

2. *Support information management. Take the lead in supporting information management at Harvard.*

   When the card catalog is fully converted to machine-readable form and entered into HOLLIS, one will no longer have to come to the library to examine catalogs, order, recall, and renew books, peruse indexes, and perform a variety of other traditional library research tasks. These achievements will fuel expectations for making primary sources, including texts, images, and multi-media applications, accessible electronically. By linking content and format, text and images, computers enable users to manipulate large quantities of information and provide a tool of enormous potential for improving research and instruction. The library will take primary responsibility for identifying, acquiring, organizing, and making accessible electronic sources in a variety of formats—CD-ROMs, optical disks, online information sources made available through local area networks or campus-wide networks. The future of electronic information and resources clearly resides in rapidly evolving networks; it will be the library's responsibility to manage and support the use of information and help to make it directly accessible to our users.

3. *Library role in networking and information technology. Play a leading role in national developments in networking and information technology.*

The dramatic development in new technologies and, in particular, the increasing importance of national information networks for research, point to Harvard's need to participate in these forums. Decisions about the structure and use of national high-speed data networks, for example, the National Research and Education Network, will have a profound impact on scholarly communication and research in the future. Moreover, important decisions made at the national level—copyright and licensing agreements, the development of standards and interface protocols, and promoting the publication of primary sources—will have a significant influence on the way in which the library supports electronic information on campus. The library must, therefore, participate in the development of national information policies as well as interinstitutional collaborative activities regarding information management to ensure that these policies and activities reflect the research and instructional needs of Harvard College. Active participation in the Research Libraries Group is an important first step in this process.

The most difficult challenge for the library will be deciding how to reallocate resources in accordance with its mission and new vision. If it is the association of librarians organized around functions that defines the library, then greater attention must be devoted to training and developing staff. Moreover, as both library functions and the needs of students and scholars evolve in response to a changing information environment, the purposes and uses of library buildings and space will be redefined, encountering tradition at every turn. Upgrading services, providing for new technology, and improving intellectual access to research materials will require additional funds and more staff and space for these activities, most of which will have to come from the reallocation of existing resources. The historic migration of collections out of Widener into separate libraries, each with its own staff, has clearly come to an end and the policy of maintaining innumerable departmental libraries must be weighed against total library costs, as well as user convenience. Just as the cost of maintaining the collection demands greater coordination among units and less duplication, so, too, the use of space to house it and the deployment of staff to service it will require a clearer definition of the purpose and contribution of each unit toward achieving the most efficient use of existing resources.

Computerization and improvements in electronic access will fundamentally alter the way the library functions. These also provide opportunities to reconsider how space and other resources are allocated in support of the library's mission. Capital funds will be needed for renovating existing buildings and spaces, but the directions outlined in this Strategic Plan will also require the reallocation of existing resources, perhaps most critically, space and staff. In sum, the library must redefine and even shrink some aspects of its current operation in order to expand other activities and carry out its new vision and plans for supporting teaching and research at Harvard.

Strategic Goal: Maintain the excellence of the library in a changing intellectual, technological, and economic environment by reallocating human, fiscal, and space resources.

Pursuing two objectives will enable the library to maintain its traditional excellence:

1. *Unify the Harvard College Library. Create a unified College Library that is responsive to changes in the intellectual environment while supporting research and teaching, primarily with existing space, staff, and financial resources.*

   Faced with rising costs and limited resources, the library must reconsider the role of each of the eleven libraries and numerous departments and collections in the Harvard College Library. In the past, the structure of the library reflected the academic structure of the College; decisions to allocate space, staff, and funds were based in part on assumptions about the nature of research that may no longer prevail. The current structure and organization of the College Library continues to reflect these assumptions and decisions. Studies confirm the increase in interdisciplinary research and also indicate that patterns of use are not necessarily reflected in the current organization of the library. We need, therefore, to examine the organization, access policies, staffing, and use of space in the library from the perspective of the relationship of collections and their principal users.

2. *Central library complex. Create a coordinated central library complex (Widener, Lamont, Pusey, and Houghton) with concentrated bibliographic and access services and collections.*

   Creating a coordinated central library complex is important not only for making research more convenient and efficient, but also as a way of reducing costs by eliminating redundant operations and improving the efficiency of the library. Planning a coordinated central library complex will also encourage consideration of related collections and activities that are currently dispersed and, therefore, inconvenient to use. For example, one of the aims of this Plan is to improve services and physical facilities for Government Documents and Microtexts (currently located in the basement of Lamont). The renovation of this facility provides an opportunity to reconsider this operation's connection to related collections and resources scattered across the campus. Littauer Library houses important collections on labor relations and state documents but also duplicates some materials held in Widener and Government Documents. The Harvard Data Center houses important materials in electronic form, some of it duplicating information in print or microform held by the library. In short, here is an opportunity to think about how these collections and resources can be more effectively arranged to support research.

SUMMARY OF STRATEGIC GOALS AND OBJECTIVES

Strategic Goal: Provide for the growth of collections by converting the card catalog to machine-readable form enabling the College Library to make the most effective use of closed-stack storage at the Harvard Depository and in the Yard.

1. Define and create the on-site collection. Balance collection growth and existing space in the Yard by moving one million volumes from Widener and develop and implement a plan that will enable the library to maintain a steady state of growth in the Yard.
2. Catalog conversion. Convert the library's card catalogs to machine-readable form and make them available in HOLLIS.

Strategic Goal: Strengthen the research collection by sustaining acquisitions and improving intellectual access, preservation, security, and maintenance of the collection.

1. Ensuring the future of collections. Maintain the strength of the library's traditional book and journal collections and enrich them with new types of material— including visual, electronic, and multi-media formats—by increasing endowment funds.
2. Improving intellectual access to research materials. Complete the retrospective conversion of the card catalog and strengthen intellectual access by introducing new databases to HOLLIS, devising better cataloging methods, and developing the subject skills of library staff who help students and scholars to locate needed information and sources.
3. Preserving collections through climate controls. Install air conditioning, new lighting, and security in Widener Library and renovate and improve the climate control systems for Houghton, Pusey, and Lamont libraries.
4. Preserving collections through technology. Strengthen the library's preservation program by raising endowment funds for mass deacidification, a conservation laboratory, and the preservation of research materials through microfilming and the use of imaging technologies.

Strategic Goal: Help students and faculty to achieve maximum benefit from library services and resources by making use of the library more convenient and efficient.

1. Conversion of Lamont and Cabot to "gateway" libraries. Renovate, refurbish, and equip Lamont Library and incorporate programs and technology into Cabot Library to create gateway libraries that will focus on the effective use of information technology by the entire Harvard community. Advanced technology and skilled staff, dedicated to undergraduate education, will provide support for experiments in instruction, database development, and scholarly communication.
2. Library services. Improve the research use of collections in the central library by the following measures: define and enlarge the open-stack research collection, create a more convenient and useful shelving plan within Widener/Pusey, establish a secure reading room for the use of noncirculating materials, design a new space for Government Documents, Microtexts, and other nonbook collections, and greatly improve access to and the delivery of research materials directly to students and scholars.
3. Science libraries. Assess the informational and research needs of Harvard scientists and, in collaboration with science faculty, develop procedures for improving the coordination of library policies and services for the sciences.

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Strategic Goal: Build and support computer and communication technologies and implement a comprehensive program for delivering electronic research materials in the College Library.

1. Support electronic information. Provide the infrastructure to support the use of electronic information in the library and link it to emerging campus networks.
2. Support information management. Take the lead in supporting information management at Harvard.
3. *Library role in networking and information technology. Play a leading role in national developments in networking and information technology.*

Strategic Goal: Maintain the excellence of the library in a changing intellectual, technological, and economic environment by reallocating human, fiscal, and space resources.

1. Unify the Harvard College Library. Create a unified College Library that is responsive to changes in the intellectual environment while supporting research and teaching, primarily with existing space, staff, and financial resources.
2. Central library complex. Create a coordinated central library complex (Widener, Lamont, Pusey, and Houghton) with concentrated bibliographic and access services and collections.

APPENDIX A:
Harvard College Library
Mission Statement

The Harvard College Library supports the teaching and research activities of the Faculty of Arts and Sciences and the University. Beyond this primary responsibility, the library serves, to the extent feasible, the larger scholarly community. The library acquires, organizes, preserves, and makes readily available collections of scholarly materials in all media and formats.

The library fulfills its mission by providing intellectual access to materials and information available at the University and elsewhere, by providing assistance and training in the location and use of these materials, and by providing facilities and services for research and study.

APPENDIX B:
The Harvard College Library
Ten Years Hence

The Harvard College Library, as one of the world's preeminent research libraries, will remain nationally and internationally prominent for the depth and breadth of its collections. The library will continue to acquire, organize, house, preserve, and make available materials that support teaching and research in the Faculty of Arts and Sciences. Library collections will include traditional manuscript, printed, and artifactual materials as well as audio-visual and electronic resources.

As academic fields continue to develop diverse patterns of research and communication, the College Library will respond with a growing array of specialized resources and services. Such a response will take place within the framework of Harvard's traditional pattern of decentralized services closely allied to the needs of particular University constituencies. Increasing reliance on shared automation systems will bolster the administrative coordination necessary to manage decentralization.

An expanded online system will provide access to both library holdings and other scholarly and information resources on campus. All card catalogs will have been eliminated through comprehensive retrospective conversion. While continuing to build and describe its own collections, the library will also provide access to external information resources. To an increasing extent it will participate in cooperative activities, including resource sharing, as a means to this enhanced access. Cooperation will also enable the library to operate more efficiently and to contribute to the worldwide community of scholars.

The College Library will pursue a deliberate strategy of identifying and satisfying user needs. Information services will be tailored to meet differing instructional and research needs. Programs to train users in locating, using, and managing information will complement more traditional reference services.

The use of facilities will be integrated to meet the changing needs of users, staff, and collections. A growing proportion of the College Library's holdings will be housed off-site. An ongoing program will ensure that materials receiving regular use or requiring immediate access are housed on campus, while other materials will be held off campus. Improved facilities will be available on campus for servicing audio-visual resources, electronic information, manuscript and other non-published materials, microforms, government documents, and other types of research materials requiring specialized equipment or services.

There will be increasing experimentation and innovation within the Library, particularly with regard to scholarly communication. More members of the Library's staff will carry multiple responsibilities that cut across the lines separating traditional functions. Both technological competence and solid traditional skills will be required. There will be an emphasis on collaboration and developing shared understandings and shared strategies. The College Library's growing dynamism, broadening concerns, and new initiatives will require a major investment in ongoing training and staff development at all levels.

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A STRATEGIC PLAN

FOR THE

UNIVERSITY OF KANSAS LIBRARIES

Lawrence, Kansas

December 1993

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This plan is the product of countless hours of endeavor over the course of nearly a year. At one point fully one-third of the Library's staff was directly involved, as were several individuals from other areas of the University. Special thanks are due to the members of the task forces who generously gave their time and talent to this process, and indeed to the staff as a whole for their comments and contributions, especially in carrying out the work of departments during the absence of their colleagues who served on a task force or the Steering Committee. Thanks are also due to many other members of the University community who contributed in the formulation of this plan. Throughout the entire process, the Library was fortunate to have the guidance of Maureen Sullivan, of the Office of Management Services, Association of Research Libraries, who never failed to re-energize us and inspire us to new efforts. Finally, special thanks are due to William J. Crowe, Dean of Libraries, for his support throughout the process.

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INTRODUCTION

The Library's principal purpose is to support the teaching, research, and service missions of the University of Kansas.[1] As the University's mission statement makes clear, outstanding libraries play a central role in maintaining its standing as a member of the American Association of Universities, and the Library is essential in fulfilling the stated goal of serving Kansas, the nation, and the world through research, teaching, and the preservation and dissemination of knowledge. Through its collections and services, the Library strives to fulfill its primary obligation to the immediate scholarly community, but it also offers unique resources to the entire scholarly world. Because it is true that "the vocation of the university depends absolutely on the library," the success of a university rests on how effectively library services are performed.[2]

As is the case with all research libraries, the KU Library is confronted with several major challenges. How the Library and the University address them will have a direct impact on how effectively the Library achieves its mission. For these reasons, our work has focused on creating a plan that articulates a vision for the future and sets clear directions and priorities to meet the challenges of this decade. Foremost among these challenges is the provision of access to Library collections, to many other information resources within the University, and to the vast resources of information beyond the University. In the current fiscal climate the Library is challenged to achieve its mission with fewer staff and constrained state funding. Most specifically, increases in the number of publications issued worldwide and escalating costs of acquiring them have had serious implications for the Library's effectiveness. Faced with rising costs, tight budgets, and reduced purchasing power, the Library has had to cancel journal subscriptions and reduce book purchases. The Library must re-evaluate what it collects and how it collects, as well as provide ready access both to traditional library materials and to electronic sources.

The new information technologies are pervasive and dynamic, and frequently necessitate expensive equipment. They are transforming the way in which people seek and find information, creating new levels of client[3] expectations for library services. The Library must respond to these challenges by acquiring the necessary technology and by developing the staff expertise needed to mediate successfully between clients and the growing array of information resources.

Ultimately the Library's ability to master its challenges rests with the competence, flexibility, and commitment of the Library's staff. The KU Library has had a long tradition of recruiting competent and dedicated staff at all levels. This is particularly remarkable given the fact that the average salary for KU librarians now ranks near the bottom of the Association of Research Libraries (ARL) salary statistics, that staff development has been woefully underfunded, and that the Library devotes significantly less of its total budget to staff as compared to ARL averages. It is important that the Library create an environment where staff can continue to develop and that the Library and University pay careful attention to their needs. The Library must provide support and opportunities for professional development and training to expand staff capabilities. These are important goals; but if the Library is to meet the challenges of this decade, it must have an effective, responsive, and forward-looking staff. The Library must reverse the trend of using funds from vacant positions for other purposes and begin to fill positions, especially support positions.

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[1] Throughout this document the KU Libraries is referred to as the "Library." The usage of "Libraries" as a singular noun can be confusing to those unused to it, and in the hope that the reader will concentrate on the substance of the Plan rather than any confusing usage, "Library" has been preferred.

[2] Jaroslav Pelikan, *The Idea of the University: A Reexamination* (New Haven: Yale University Press, 1992), p. 117.

[3] Terms used by libraries to refer to the people who make use of them vary (e.g., client, user, patron, reader, etc.), and each term currently in use evokes negative reactions from some library professionals. *Library Literature* largely avoids the issue by not having a heading for the concept, referring to "library use" or "service to [a particular group]." Clients of the KU Library include faculty, students and staff of the University; faculty, students and staff of other institutions of higher education; and the general public.

Acknowledging these challenges early in his tenure, Dean Crowe initiated a strategic planning process. In January, 1993, some twenty-five representative members of the Library's staff, along with representatives from the Law Library, Health Sciences Library, and the Computer Center, came together for a two-day retreat under the guidance of Maureen Sullivan. Following that meeting, Dean Crowe, in consultation with the Library Faculty Assembly's Budget and Planning Committee, selected a Steering Committee to lead the planning process. Dean Crowe charged the Steering Committee

> to be responsible for leading the planning process and producing a planning document by December 1993; giving direction to and coordinating the work of task forces that may be created in order to promote wide involvement in planning while minimizing duplication of effort; resolving possible overlapping responsibilities and problems among task forces; consulting widely—with the staff, with representative Library users, and others—to obtain information and demystify the process being followed; communicating effectively with me and with all interested groups throughout; encouraging fresh thinking and acting as a catalyst for ideas; and, seeking a consensus about the values that should be reflected in the plan and in recommending priorities for the KU Libraries.... In the end, I expect strategic planning to serve at least four important purposes: **to sharpen understanding of how we best can meet the needs and wants of our users; establish a clearer process within the Library for decision-making; focus new and reallocated resources on goals and objectives of highest priority; and, generally, strengthen communication throughout the Library about how best to achieve our aspirations.**

The Steering Committee began meeting in April and developed a revised mission statement (which appears on p. 5), an initial vision statement, an environmental scan of the situation in higher education with particular emphasis on research libraries in public universities, and an internal assessment of the Library. These draft documents were distributed to the staff and discussed at several open meetings at the end of May and beginning of June. Following on these discussions, the Steering Committee created seven task forces to develop recommendations in the following areas: intellectual access to collections and information resources (regardless of where located); development of and physical access to collections and information resources (regardless of where located); reference and instructional programs; space, facilities, and equipment; staff; financial resources and development; and, on-line systems.

Each task force was given several goals derived from the initial vision statement and was charged with

- reviewing the goals;
- analyzing external factors and the University environment as they pertain to each goal;
- identifying what constitutes best thinking, research, and practice in this area by gathering information from library literature, phone calls, and/or site visits;
- reviewing the Library's advantages and limitations in this area, including an evaluation of present organizational structures, staffing patterns, policies, allocation of resources, especially communication and decision making structures;
- identifying areas that need to change or improve and considering alternatives;
- after reviewing alternatives, the task forces were to recommend long-term strategies (5—10 years) for achieving the goals, recommending under each strategy, steps to be taken in the short term (2—5 years);
- identifying the resources needed to achieve the goals in the short and long terms;
- placing each of the goals and recommended courses of action in order of priority;
- considering what values need to be strengthened or changed to help achieve these goals; and,
- identifying areas for further study.

Each member of the Steering Committee served as a liaison to one of the task forces.

The seven task forces began their work in a two-day session facilitated by Maureen Sullivan on July 19-20, and completed their work on October 22. Each task force produced a detailed report containing recommendations that addressed the goals in its charge. These reports were made available to all members of the Library staff. At the same time the members of the Steering Committee conducted a series of consultative meetings with key administrators and others within the University to gain their insights into the future directions of the University and to keep them informed about the strategic planning process in the Library. The Steering Committee returned to its initial vision statement and reshaped and refocused it in light of all that had been learned. The vision statement that begins on p. 6 is meant to function both as a statement of the Library's vision for the future and as a summary of the Library's plan to achieve that vision. In the same way that the Library's vision and plan are tightly integrated, so too are the organization's values infused throughout the vision and plan. Building upon the task force reports and comments solicited from Library staff and others, the Steering Committee produced the present plan—consisting of a mission statement, a vision statement, an action plan, and implementation recommendations —which was completed and delivered to Dean Crowe on December 17, 1993.

UNIVERSITY OF KANSAS LIBRARY
MISSION STATEMENT

The mission of the University of Kansas Library is to support the University's own mission as a center for learning, scholarship, and creative endeavor. The University's mission is achieved through

- high-quality undergraduate, professional, and graduate instruction sustained by outstanding libraries and information technology;
- high levels of research productivity;
- service to the state of Kansas, the nation, and the world through the preservation and dissemination of knowledge;
- international study and cooperative research, and
- a commitment to excellence, a multicultural environment, the dignity and rights of the individual, and to intellectual diversity, integrity and disciplined inquiry in the search for knowledge.

The Library fulfills its specific mission of supporting the academic programs and values of the University by

- selecting, acquiring and preserving outstanding collections of scholarly materials in appropriate media and formats which best fulfill the research needs of the University community;
- cataloging, organizing and making these collections readily available for the University, the state of Kansas, and the international scholarly community;
- providing responsive, high-quality reference, information, and instructional services;
- providing access to collections and information resources located elsewhere in the world;
- cooperating with other libraries and organizations within Kansas and beyond to ensure access to all scholarly information resources; and,
- providing a physical and intellectual environment conducive to learning, scholarship, and creative endeavor beyond the classroom and laboratory.

VISION AND OUTLINE OF ACTION PLAN

The ultimate measure of a university research library's success is the satisfaction of its client groups with their ability to obtain informational and scholarly resources necessary to meet their objectives in teaching, conducting research, and providing service. Success in this endeavor has, in the past, been measured primarily by a researcher's ability to find a given item within a given library's collection. Anticipating scholarly needs will continue to be a goal of the Library, but given the proliferation of published information and breadth of scholarly inquiry and the Library's demonstrated inability to purchase, process, and preserve print-based copies of all worthy items, the Library must place more emphasis on identifying and meeting current client needs and concomitantly less on unknown or potential needs, restricting speculative collection development to areas in which it can offer unique or highly significant contributions to scholarship. Increasingly—but in some disciplines more than others—the most viable solution to matching client needs and the Library's ability to provide them will be electronic access to and purchase of information at the point of need. Evolving toward a "client-based needs assessment philosophy" demands the allocation of greater resources to the ongoing identification of who the Library's clientele is, their needs and information-seeking practices, and to the provision of sufficient and proficient Library staff who will help clients interpret and navigate among the many options, both new and traditional, to satisfy their needs. Provision of one-on-one assistance to clients will continue to be vital, but increased emphasis will be placed on educating and re-educating faculty and students using collective instructional strategies with the goal of increased client self-reliance.

The provision of access to a library's collection has traditionally been one of the cornerstones of its *raison d'être*. Developments in information technology during the past twenty-five years, not to mention those on the horizon, in no way reduce this responsibility but rather change it dramatically. To meet most of the information needs of its clients in the very near future, the Library must have a complex, sophisticated, and pervasive online system based upon up-to-date hardware, software, and networking. This broader "system" will include traditional core library public access, file management, and transaction processing functions, all maintained and presented to clients and staff in an integrated manner. All system modules and networks will use standard protocols and will be constructed with an "open systems" approach to facilitate their ability to be integrated with other local and remote online systems and to handle new kinds of information content and forms of presentation. All local networks will be connected to and accessible from the KU campus ethernet network and through it be connected to and accessible from all regional, national, and international TCP/IP-based networks. The local workstation for both clients and staff will be a single intelligent, networked microcomputer capable of using campus local area network resources, other campus hosts, and remote hosts via the Internet. Each workstation will be capable of both simple terminal access to remote hosts and of operating client software for a wide variety of servers and hosts. By virtue of supporting standard protocols and being connected to local and national networks, all library electronic resources will be sharable and usable, to the extent allowed by licensing, by remote users throughout the University, the state, and the world.

While proceeding to develop the broader online system envisioned above, completion of a totally online catalog of those materials owned by the Library must be the foremost objective for providing cataloging and other processing information (e.g., acquisitions information, serial and monograph holdings information). Volume and immediacy of catalog record production are the highest priorities. Reviews of values, procedures, standards, staffing, and equipment should begin immediately. The goals are to provide access to all material as soon as possible following order and receipt and also to provide clients with access to all presently owned materials by the end of FY99. Investigation of best practice supports the belief that clients are best served by having some access to the complete collection, even if excellence of individual records and catalog structures must be moderately reduced. Investigation of best practice also reveals that staff morale is improved by catching up and staying current with processing. These recommendations apply to all cataloging and other processing agencies in the Library.

The Library must and will continue to have a role as the physical as well as the metaphorical heart of the University, with the mission of providing a physical as well as an intellectual environment conducive to learning, scholarship, and creative endeavor. Much of the existing physical plant of the Library inhibits its ability to achieve this mission. Despite the welcome new library facilities for science, engineering, art and architecture and the Regents Center which have opened during the past fifteen years at KU, the Library desperately needs more and better quality space. Several of the facilities are old and in need of significant repairs. Space for clients and staff is limited in many areas; in some facilities book stacks are filled to capacity, and frequent major shifts of collections disrupt Library operations and impede delivery of service. Watson Library, simply and emphatically, is full. Space in Watson must be relieved and reallocated to accommodate collection growth, reader space, electronic workstations and expanded services. The Gorton Music Library and the Government Documents/T.R. Smith Map Library suffer notably from space and facilities deficiencies. A portion of the top floor of the Spencer Research Library has no roof and is thus currently unavailable to accommodate growth. The needs of the Government Documents/Map Library may be addressed with the completion of Hoch construction, and completion of the top floor of Spencer Library has been discussed, but a new Music Library facility likely will not be available for at least a decade. Compounding these problems is the lack of a centralized office in the Library to coordinate information, requests, and planning for space-related needs. Installation of equipment for new technologies is also difficult and affected by adverse conditions in the physical plant. In addition, book stacks, staff offices and public areas are often poorly lit, inaccessible to clients with various disabilities, and cause for concern about the security of staff, clients, and collections. Environmental conditions vary and often put staff, clients and collections at risk. Workstations to access local and remote catalogs, databases, and other information resources are not available in sufficient numbers or locations to meet the needs of clients and staff alike. Health and safety compliance in staff and public areas, coordination of a regular maintenance schedule, and successful communication to facilitate prompt remedies for maintenance problems also warrant attention. The Library will pursue short-term answers to address these most pressing needs, while simultaneously seeking long-term solutions.

To meet the Library's mission of providing information and innovative services to the University community, it is essential that the Library nurture and develop its most valuable resource: the expertise of its staff. To do so means increasing support for training, continuing education, professional development, and research. The Library should work to develop a shared sense of direction among the staff and to assure that each staff member's assignment is rewarding and provides opportunities for growth. To better reflect and respond to the needs of the University and broader community, the Library should increase the diversity of the staff. Stronger communication in a collegial and participative atmosphere and clearer decision-making processes are needed to enable the Library to fulfill its mission. It is the responsibility of each individual staff member as well as the Library as a whole to initiate, sustain, and support these efforts.

To provide collections, services, and staff expertise to meet current and anticipated client needs, the Library must increase its budget substantially over its present level. Stronger support from the State continues to be essential. The Library must also expand its base of support and begin attracting more gifts, endowments, and grants. External funds will necessarily play an increasingly greater role in KU Library funding. It is important to the success of any efforts to attract funds that the Library be seen as central to the University, not just by students and faculty, but also by alumni and the larger community. The satisfaction of principal client groups is of course the foundation of the Library's support, but not in itself sufficient to raise the resource base; therefore, additional staff resources must be focused on development, outreach, and public relations.

Below is an outline of recommended actions and goals which follow from the vision and overview presented above.

I. Provide Collections, Services, and Programs Designed to Meet Client Needs.

A. Identify current client needs for information resources, access tools, and reference and instructional services and programs.
B. Strengthen support for collection analysis, management, and development.
C. Develop a consolidated program to preserve the Library's collections.
D. Create additional space and continually evaluate present space usage to facilitate collection growth, more rational and convenient location of collections, and new and expanded client services.
E. Enlarge clients' access to un-owned information resources.
F. Provide and expand reference services.
G. Expand instructional and educational programs.
H. Provide adequate administrative support for and attention to the provision of reference, instructional, and access services.
I. Strengthen communication and cooperation both within the university community and with other libraries in the region to avoid unnecessary duplication of collections and programs.

II. Integrated Online System

A. Specify requirements for a computer-based system that includes new core library functions, consortial capabilities, general network access to other systems, and an emphasis on the virtual library.
B. Educate staff on what is possible and desirable in an online system; prompt staff to consider Library-wide system issues; and present the advantages of a system change.
C. Decide whether continued local development is a viable option for meeting the new specifications.
D. Investigate consortial possibilities and technical requirements that may influence the choice of a new system.
E. Fund, install, and maintain the required networking and workstation infrastructure for the Library.
F. Acquire an integrated system for new core library functions.
G. Provide for the ongoing functions of operating, maintaining, and upgrading the core library system, the network infrastructure, and staff and public workstations.
H. Manage and coordinate the implementation and ongoing use of the new core integrated system.

III. Total Online Access to KU Collections

A. Establish a detailed plan to insure total online access by June 30, 1999.
B. Review bibliographic standards and level of records.
C. Review cataloging and processing procedures.
D. Review staffing requirements to accomplish this plan.
E. Review equipment requirements to accomplish this plan.
F. Review collections in preparation for processing.

IV. Optimize Current Space, Facilities and Equipment, and Plan for New Space and Equipment

A. Provide an organizational structure which facilitates resolution of space, facilities and equipment needs within the Library and across campus.
B. Administrative initiatives which could be accomplished within the Library, without extensive involvement of outside agencies.
C. Develop comprehensive short-term plans to improve and expand existing space and facilities.
D. Develop long-term plans for future space needs.

V. Staffing and Organizational Issues

A. Develop the expertise of the Library staff.
B. Increase the diversity of the staff.
C. Strengthen communication within the Library.
D. Develop clearer decision-making processes.
E. Develop an organizational structure that facilitates decision-making.

VI. Development, Outreach, and Public Relations

A. Identify and pursue new funding sources.
B. Increase the Library's visibility as an integral part of the University community.
C. Promote and recognize the role each staff member plays in building support for the Library.
D. Demonstrate effective management of resources.

THE LSU LIBRARIES

MISSION

To collect, preserve, and provide access to information resources which support the instructional, research, public service programs, and mission of the University.

Goal 1:

To provide a variety of services to facilitate the use of collections, to access local and remote information sources, and to address the information needs of the Libraries' constituencies.

Procedure

- Maintain appropriate library hours
- Provide user services focusing on improved information access
- Provide library instruction to targeted populations
- Increase awareness and response to the University's research and teaching priorities by initiating a formalized outreach program
- Serve as a gateway to local, national, and international information resources
- Improve signage
- Expand services to accommodate the disabled community
- Initiate services to support Louisiana business, industrial, and economic development

Assessment

- Patron counts conducted periodically
- Patron responses on user satisfaction survey and user evaluations of services
- Access
  - Measured use and effectiveness of dial-in access to LOLA (Library On-Line Access) provided local high schools via SNCC reports, pre-test and post-test results
  - Add new electronic databases assessing effectiveness through user studies
  - Track news releases, brochures, other library publications promoting availability of LOLA dial-in access correlated with use rates
  - Work stations installed on LAN to increase access to existing CD-ROMs
  - Results of materials availability study
- Library instruction
  - 100% new faculty and graduate students contacted and offered library orientation
  - Number/mix of patrons participating in library instruction programs
  - 10% undergraduates participating in program
  - 30% graduates participating in program
  - Cassette tour, user publications translated into at least two other languages
- Measured effectiveness of outreach program relevant to research and teaching priorities by tracking contacts and via targeted faculty surveys

- Installation of electronic imaging work stations providing information gateway
- Standardized sign system in place.
- Compliance with American Disabilities Act and added work station accessibility
- Business and industrial services to support economic development established

Goal 2:

To enhance the development, organization, arrangement, and preservation of strong collections pertinent to the present and future programs of the University.

Procedure

- Develop/implement a collection development program to accommodate research and teaching priorities
- Optimize resources to balance the access, acquisition and preservation of information sources
- Develop/implement preservation program
- Create machine readable/accessible records for unconverted and unprocessed materials
- Develop/implement priorities for completion of Dewey reclassification project
- Seek outside gifts and funding to support library programs

Assessment

- Collection development (CD)
  - Complete CD draft policy utilizing appropriate measurement instruments for codifying collection direction for research and instruction programs
  - Management reports
  - Integrate CD assignments with professional responsibilities in at least six additional librarian positions and determine effectiveness via faculty feedback
  - Number serials and monographs acquired, canceled, in relation to available funds
- Collections surveyed to ascertain preservation needs
- Machine readable/accessible records
  - Records for at least two unprocessed collections (Laughlin, Rhoades) in the database
  - A 20% increase in records processed for retrospective conversion should be reflected in cataloging statistics
  - Measurement against national bibliographic cataloging standards
- Measures reflecting Dewey ranges reclassed vs. unreclassed
- Results of Academic Accreditation agency visits
- Peer institution comparisons
- Records indicating increased participation in gifts and exchange program
- Ten proposals submitted for external funding over a three year period (1991-1994)

Goal 3:

To increase opportunities for library staff development in order to stimulate

professionalism, improve performance, and enhance the service and reputation of the library

Procedure

- Establish a comprehensive staff development program
- Increase participation in continuing education programs (e.g. Comprehensive Public Training Program)
- Develop a mentoring program to benefit new staff
- Improve support for library staff attendance at professional conferences and in professional participation and publication activities
- Improve staff development opportunities for graduate assistants and student employees
- Revive the Ella V. Aldrich Schwing Lecture Series

Assessment

- Staff development program statement completed
- Track number of staff programs offered; results of participant evaluations
- Measure success of participants in mentoring program to determine effectiveness
- Track number of staff holding appointed and elected professional association positions
- Track number of staff publications annually and impact via citation indexes
- Track number of invited and proffered presentations at local, state, national, and international meetings
- Track number of, or revisions to, staff development programs available to graduate assistants and student employees
- Host annual Schwing lecture

Goal 4:

To provide an environment fostering effective library administration

Procedure

- Establish mechanism to review library organization, staffing and space in light of changes in information technology and library resources
- Develop a universitywide information policy
- Develop a uniform and comprehensive method for collecting library statistics and data
- Establish an effective methodology for proposing, reviewing, and assessing library goals, objectives, and strategies in order to develop reliable, relevant benchmarks
- Develop a system for producing NOTIS management reports; formulate viable reporting schedule
- Establish search and recruitment guidelines for filling library positions
- Increase the diversity of the library staff
- Establish an ongoing self-evaluation program

Assessment

- Report on library organization, staffing and space completed
- Information policy formulated

- Comprehensive statistics and data collection program in place
- Results of assessment measures will become the basis for future benchmarks
- Management reports received and interpreted
- Search and recruitment guidelines in place
- Meet University goal in terms of minority recruitment
- Outcomes of self-evaluation studies

Goal 5:

To foster support and leadership in developing, sharing, and preserving library and information resources within Louisiana.

Procedure

- Develop and formalize a network of Louisiana libraries
- Assist in broadening information sharing, preservation activities, and automation capabilities throughout libraries in the state
- Conduct shared information, preservation, and automation training programs for Louisiana librarians
- Explore increased resource sharing among academic libraries

Assessment

- Evaluate libraries' willingness to participate in a state network
- Presence on appropriate statewide committees
- Number of libraries accessing LOLA; reports quantifying use of system
- Number of libraries involved in shared information and preservation activities
- Number of Louisiana libraries participating in initial networking activities
- Number of training sessions conducted and participant evaluations
- Measures of interlibrary loan use
- Measures of attitudes toward cooperatively supported collections

4/7/93

The University of Pennsylvania Library
Five Year Plan
1993-1997

Positioning for the 21st Century

Mission

The libraries of the University of Pennsylvania form a collective entity to serve the academic knowledge and information needs of the University's schools. They serve a variety of academic microclimates, supporting the plurality and diversity of the University's academic programs while recognizing that the pool of information and knowledge resources represents an intellectual commonwealth equally accessible to all members of the University community. It is the goal of the Library to share resources and avoid undesirable redundancy in collections and services among units.

The Library serves as the principal campus repository of human creation and memory in traditional formats, and serves as the principal campus broker of academic information in electronic format as well. It is a major laboratory for faculty and student research in many disciplines, and seeks to create a set of scholarly environments optimally conducive to productive research and study.

The Library provides convenient access to as wide a range of important scholarly materials as possible, in all applicable formats, concentrating on materials that are likely to be of long-term or permanent value for research and teaching without regard to format. It is also the Library's mission to provide timely and cost-beneficial access to, and delivery of, scholarly resources important to scholarship at Penn which are available elsewhere.

Priorities

- Excellent links with, and understanding of, the academic programs of the University and their needs for knowledge and information resources.
- An information base adequate for Penn's academic programs--one that will position us assertively and contributively among our peer institutions.
- Access to the information we have--convenient, timely and conducive to its effective use for study and research.
- Access to information available elsewhere--as rapidly, conveniently and economically as possible.
- Services and facilities adequate to support our mission.

Major Goals and Objectives

A. Empower the User

Through the use of computer technology and ergonomic service design, place users and their needs at the center of Library planning.

1. Provide an environment of networked, multitasking personal computer workstations for Library patrons and staff.
2. Establish a consistent, user-friendly set of gateways and screens, with both guided and command modes, to allow users to select their own functions and guide their own services.
3. Provide patrons with easy defaults from locally available resources listed in Franklin and PennData to external resource files like RLIN (Research Libraries Information Network) and HSLC (Health Sciences Libraries Consortium), and hence provide increased access to materials outside the Penn Library.
4. From the main menu provide the ability for user-initiated acquisitions requests (and library responses), for various library services, e.g. document delivery, new book ordering, etc.

5. Develop and recruit talented and dedicated librarians and support staff prepared for a decade of change by the following means:

    a) educate and support continuing education in information technology, e.g. seminars, travel, release time

    b) study the emerging needs of the research/teaching environment

    c) creative support of teaching by librarians in various disciplinary research

    d) reward excellence

    e) achieve adequate and competitive compensation level.

B. Acquire, Broker and Manage Academic Knowledge and Information Resources

Develop collection development and management programs tailored to the needs of Penn's academic programs. Include all relevant formats of information. Focus collecting efforts on Penn's areas of program strength; reduce efforts to support marginal areas, depending on access to resources of other libraries with known strength.

1. Increase the volume of incoming knowledge and information from appropriate domestic and foreign sources over the next five years to bring us to at least the 70th percentile position among universities with which we compare ourselves academically.

2. Add a significant number of widely-used computer bases and sets; at least ten more significant bases over five years.

3. Provide access to needed electronic, statistical and data resources as well as more traditional formats.

4. Develop and establish a collection management program, including preservation, collection review, storage and discard components. This program is intended to optimize the quality and effectiveness of collections and space.

5. Establish effective two-way library liaison with each academic department and program at Penn.

6. Increase storage capacity to keep pace with B1 above.

C. Enhance Access to Information Resources

Using electronic means and improved delivery systems, provide faster, easier access to, and delivery of, knowledge and information resources in all applicable formats, whether held locally or distantly.

1. Complete the retrospective conversion of the Library's card catalog so that Franklin is a comprehensive record of materials in the Penn Library.

2. Catalog uncataloged material.

3. Continue to develop PennLIN to provide easy but powerful access to Library's information resources, including preprint and technical report files, linking library holdings to journal table of contents.

4. Using scanning technology, enhance the capacity for delivery of journal articles and reports directly to user workstations.

D. Optimize the Environment for Study and Research

Using ergonomic principles and empirical study of user information-seeking behavior, devise library environments which will optimize learning, research and scholarly production for Penn's academic community.

1. Reorganize and redesign library space to meet the variety of needs, e.g.: quiet research/study environments, group study rooms, casual reading areas, and facilities for consultation with library staff.

2. Redesign patron and staff work spaces to provide efficient, functional and attractive working environments.

E. Optimize the Library's Resource Base to Achieve these Goals

1. Develop gift and grant campaign to provide resources for one-time needs in support of the five year plan.

2. Double the Library endowment over five years, emphasizing:

   a) library materials endowments

   b) endowment of the Library Directorship and two existing curatorial positions (Special Collections, East Asia, Middle East, South Asia, Humanities or Social Sciences)

   c) unrestricted endowment

   d) one-time funds for computer labs and named, rehabilitated spaces (including endowment for upgrading and replacement of furniture and replacement of furniture and equipment as components).

3. Raise the Library's incremental budget from all sources to reach the 70th percentile of Library dollars per standing faculty member on the list of 27 institutions with which Penn compares its academic programs.

4. Work closely with Information and Systems and Computing to obtain an adequate electronic architecture and infrastructure to accomplish these goals.

September 1994

PROGRESS OF THE CURRENT FIVE YEAR PLAN 1993/1997

Through the use of computer technology and ergonomic service design, place users and their needs at the center of Library planning.

A. Empower the User

- Developed a common user interface, providing consistent access to to the online catalog & mainframe-mounted information bases
- Implemented Hook-to-Holdings, search results linked to serials receipt & circulation status
- Installed two advanced, networked microcomputer labs in the Van Pelt-Dietrich Library
- Developed and initiated Access 2000, a plan to increase access and delivery of information at reduced cost
- Designed and implemented an electronic gateway, increasing the number of resources, both distant and local, available through PennLIN and providing clearer, more convenient routes to networked information.

Develop collection development and management programs tailored to the needs of Penn's academic programs. Include all relevant formats of information. Focus collecting efforts on Penn's areas of program strength; reduce efforts to support marginal areas, depending on access to resources of other libraries.

B. Acquire, Broker & Manage Academic Knowledge & Information Resources

- Added 7 locally mounted information bases accessible via the PennLIN gateway along with 13 remote bases and an Internet navigator or Gopher
- Maintained an ongoing collection management effort through collection review, pruning and transfer to storage
- Created Collection Management and Development program; achieved effective liaison with academic departments.
- Managed serials costs, attaining a balance between serials & monograph acquisitions and avoiding a "serials crisis".

Using electronic menus and improved delivery systems, provide faster, easier access to, and delivery of, knowledge and information resources in all applicable formats, whether held locally or distantly.

C. Enhance Access to Information Resources

- Completed retrospective conversion of 171,000 titles with funding from the provost
- Improved access to remotely held resources using the ARIEL document delivery system—a means of digitizing journal articles and other full-text materials for transmission over the Internet and printing with high resolution laser printers
- Reorganized Technical Services workflow to reduce redundancy and duplicative effort, from ordering to finishing to shelving

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D. Optimize the Environment for Study and Research

Using ergonomic principals and empirical study of user information seeking behavior, devise library environments which will optimize learning, research and scholarly production for Penn's academic community.

- Redesigned user environments according to Five Year Plan objectives in several pilot areas: The Eugene Ormandy Memorial Listening Room, Class of '37 and Rosengarten Computer labs, and the Esther and Philip Klein Lounge
- Completed program studies for the VPDLC rehabilitation
- With Bower, Lewis and Thrower Architects, completed rehabilitation feasibility study

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E. Optimize the Library's Resource Base to Achieve these Goals

- More than doubled the overall endowment base since 1988
- Raised $4.5 million toward the Van Pelt-Dietrich rehabilitation
- Made the Library a priority of the University's capital campaign
- Accelerated development efforts through the appointment, by the Board of Overseers, of a Campaign Committee and Campaign Steering Committee
- Drafted a campaign plan
- Gained $2.6 M in University funding for Access 2000
- Improved professional salary base, through budgetary reallocations, to attract talented & dedicated librarians

INTRODUCTION

I am pleased to introduce the strategic plan for the Purdue University Libraries. Entitled "A Shared Commitment to Excellence: A Plan for the Future," it represents the collaborative thinking of individuals and groups throughout the University who have engaged in a far-reaching dialogue regarding future directions for the Libraries.

Preparation of the plan has involved the consideration of trends in higher education and scholarly communication, along with the needs of the Purdue University community. The challenges and opportunities presented by evolving technologies have been explored. The result is a strategic plan consistent with the mission of the University and responsive to a changing environment, a plan which has as its strongest theme outstanding information access for the entire Purdue community.

Five key strategic directions have emerged. Expressed in the form of results, they are as follows:

- User Access Increased
- Collection Quality Enhanced
- Library Instruction Redefined
- Information Delivery Expanded
- Internal Resources Optimized

Each key direction will be implemented via strategies, for which specific programs and actions are outlined in the plan which you have before you.

The planning effort began in 1988 with a campus-wide survey of faculty and students, in-depth interviews with Purdue deans, and meetings with all library faculty and staff using focus group techniques. In addition, environmental trends which would impact the Libraries were assessed and ongoing monitoring of these trends was implemented. Using the results of this work, further conversations took place and by late 1991, the framework of the plan was completed. While a planning time line is usually much shorter than experienced here, it is important to note that a major objective of this planning process was to change the internal "culture" of the Libraries, along with developing the plan. Hence, the whole process required a more extensive time commitment. During 1992, through the use of action-planning teams, faculty, staff, students, and others from throughout the Purdue community participated in the planning process. They joined the Libraries faculty and staff in applying their expertise and knowledge to the development of strategies and actions for realizing the Libraries mission: partnership with the schools and departments in the teaching, research, and service commitments of Purdue University. The later stages of the planning process were accelerated due to a recommendation by the 1991-92 University Library Committee "that the Libraries prepare a comprehensive plan for the future."

I would like to thank all those within the Libraries and the Purdue community who have participated in our planning process. A special acknowledgement is due the hardworking members of the Planning Council and the nineteen action-planning teams whose names are listed elsewhere in the plan. Two individuals should be singled out for special tribute: Nancy Hewison, Planning Librarian, who chaired the Planning Council and under whose leadership the final plan took shape, and Nancy Oswalt, Secretary to the Dean, who added this project to her many other duties.

Successful planning never ceases, and it is my hope that you will help us continue the process by sharing with the Libraries your thoughts on refining and implementing the plan.

Emily R. Mobley
Dean of Libraries
February 1993

THE LIBRARIES VISION

In the twenty-first century, the Libraries will utilize sophisticated technologies to provide optimum access to and delivery of information, regardless of its location, rather than serving as a major local repository. An expert staff will assist the members of the Purdue community in becoming proficient and productive users of information.

As the twenty-first century begins, the Libraries of Purdue University are partners in the teaching, research, and service missions of the University. The Libraries primary role in this partnership is to provide access to and obtain information, and to empower the Purdue community to use information, rather than to serve as a major storehouse. A strong instruction program, closely coordinated with classroom faculty, is provided for all students, with emphasis on critical thinking and information literacy skills for undergraduates. Sophisticated, discipline-oriented information services enhance faculty productivity and the outreach programs of the University.

With the help of a variety of appropriate technologies, the Libraries provide access to information from local, regional, and national services. Some of these are maintained and operated on campus for the benefit of local users while others, although located remotely, are also accessed with ease. Once needed information has been identified, it is delivered rapidly and is available in a variety of formats.

Electronic and other forms of access, document delivery services, and Purdue's own collections are carefully managed in response to an ongoing needs assessment. The Libraries success is evaluated in light of the requirements of scholars and students in disciplines as diverse as the sciences, engineering and technology, humanities, and the social sciences.

The Libraries information consultants work closely with individuals and groups to understand the context of their information needs and to develop programs, systems, and technological applications to help them retrieve, manage, use, and communicate information more efficiently and effectively. The staff expertise, services, and collections extend beyond the West Lafayette campus through programs designed to provide rapid access to information for individuals, not-for-profit agencies, governmental units, and businesses, both within and outside the state of Indiana.

The programs and services of the Libraries are carried out by a diverse group of faculty and administrative, professional, and support staff. The "library family" is characterized by high morale, a strong sense of common purpose, and social responsibility. Staff from all employee classifications work together in flexible teams to analyze issues and opportunities, recommend actions, and participate in implementation.

Effective communication throughout the Libraries and an active staff development program contribute to a positive organizational climate and the successful achievement of the Libraries mission. Library faculty and staff maintain excellent communication with the Libraries partners in the University.

THE LIBRARIES MISSION

The Libraries are partners with the schools and departments of the University in meeting the teaching, research, and service commitments of Purdue University.

The Libraries primary role is embodied in five components of the mission: a partner in teaching and research, information literacy and lifelong learning, a partner in service, information transfer, and a repository of the intellectual record.

A PARTNER IN TEACHING AND RESEARCH. Through collaborative efforts with teaching faculty, the Libraries not only respond to trends in higher education affecting teaching and research, but also participate in shaping curricular innovations made necessary by changes in the environment. Information resources required in support of these innovations are thus identified and obtained as part of a broadened process at the University. The Libraries maintain an ongoing awareness of the curriculum and the research interests of the faculty and use this information in designing services and in the building and maintenance of collections.

INFORMATION LITERACY AND LIFELONG LEARNING. Being versed in the ability to obtain and critically evaluate information is one hallmark of a university education. Through partnership with other teaching faculty, the Libraries offer a program of information literacy which emphasizes critical thinking skills and addresses the use of information in a variety of formats. Distance learning capabilities permit the extension of this mission component beyond the West Lafayette campus to those participating in the University's lifelong learning programs.

A PARTNER IN SERVICE. The Libraries recognize a twofold responsibility in regard to the University's service role. In addition to direct service to individuals and groups both on and off campus, the Libraries provide informational support to those divisions and programs, such as the Cooperative Extension Service, Statewide Technology, and the Continuing Education Administration, which have off-campus service commitments.

INFORMATION TRANSFER. The Libraries facilitate the identification and delivery of information, regardless of format, in support of the University's teaching, research, and service commitments. Increasingly, this is accomplished by electronic means and is guided by an ongoing assessment of the information needs of the Libraries primary user population.

A REPOSITORY OF THE INTELLECTUAL RECORD. To support the mission of the University, the Libraries acquire and maintain a carefully selected portion of the intellectual record. Policies for collection are focused on information to support the needs of this university in relation to the broad spectrum of knowledge. The Libraries have repository and archival responsibility for Purdue publications, and provide a physical environment and remedial treatment conducive to longevity for all library materials. Space requirements increasingly emphasize service functions in contrast to warehousing functions.

THE ROLE OF TECHNOLOGY

A common thread unifying the components of the Purdue Libraries mission is the use of technology for the identification and delivery of information and information services. Access to both local and remote collections is necessary to support research, teaching, and service. This is accomplished to an increasing extent through electronic databases and networks. The portion of the intellectual record that is housed at Purdue is managed and accessed with the help of computers. Due to cost and space requirements, a growing percentage of the Purdue collection is stored in electronic or other nonprint formats. Once desired information has been identified, in whatever format, technology plays a significant and expanding role in its transfer to the user.

Technology is of vital importance in realizing the information literacy and lifelong learning component of the Libraries mission. The use of electronic information systems highlights the need to think logically, to clarify a question, conduct an informed inquiry, and organize the results. Computers are also important tools for self-directed learning. Today's libraries are becoming technology-rich learning centers where both computer-related skills and the competencies of critical thinking may be acquired and refined under expert guidance.

The Purdue Libraries will be leaders in an ongoing, interdisciplinary exploration of the information future. Campus-wide working groups will study the implications of changes in the patterns and tools of scholarly communication and educational practice. Research in new technologies for the creation, storage and retrieval, analysis, and transmission of information will result in the design of innovative systems for students and scholars.

KEY STRATEGIC DIRECTIONS

In achieving its mission, the Libraries will pursue five key strategic directions, each of which can be regarded as a set of strategies which find expression in particular programs and actions. The key directions set forth on the next few pages are not in a priority order; all are critical to the fulfillment of the Libraries mission.

Key direction #1: USER ACCESS INCREASED

Purdue students, faculty, and staff will have rapid, broad, and flexible access to the world of information.

RATIONALE:

Research libraries and the universities they serve find themselves today in an environment dominated by information. The overwhelming publication output in every discipline and the continuing retrenchment of public funding for higher education contribute to a shift in emphasis from local ownership to global access.

The tools of the scholar are expanding. It is now routine to use the power of personal computers to perform data processing and analysis previously carried out on mainframe computers. Microcomputer enhancements bring powerful information management capabilities to the desktop. The networking of supercomputers renders irrelevant the geographic location of some research collaborators.

Librarians work with scholars, publishers, database producers, and experts in fields such as artificial intelligence to develop technological applications which enhance the productivity of individuals and facilitate collaborative efforts.

STRATEGIES	PROGRAMS AND ACTIONS
EXPAND ELECTRONIC ACCESS TO POWERFUL INFORMATION TOOLS Assisted by appropriate technologies, the Libraries will provide access to information from local, regional, national, and global services. Easy-to-use computer interfaces will be provided for all services.	- ELECTRONIC GATEWAYS to information at Purdue and worldwide - PACLink implemented - ONLINE TABLE-OF-CONTENTS SERVICE - ADDITIONAL DATABASES, such as ERIC - NEW BOOKS DATABASE
IMPROVE ACCESS FOR THOSE NOT TRADITIONALLY LIBRARY USERS The Libraries will provide improved access for the differently-abled, those for whom English is not the first language, the distant learner, and Purdue programs with off-campus service commitments.	- EQUIPMENT TO RESPOND TO AMERICANS WITH DISABILITIES ACT - IMPROVED SIGNAGE - ELECTRONIC LINKAGES WITH OTHER PURDUE NETWORKS - NEEDS OF DISTANT LEARNERS/EDUCATORS identified and services initiated to meet them
REDESIGN CLASS RESERVES SYSTEM The productivity of undergraduate students will be enhanced by dramatically improved access to class reserve materials.	- RESERVES SYSTEM ASSESSED for responsiveness to student needs - CIRCULATION OF RESERVES AUTOMATED - ONLINE FULLTEXT DATABASE explored for lab and lecture notes, copyright-cleared items, and interactive course-related resources
EXPLORE THE INFORMATION FUTURE The Libraries will lead an ongoing, interdisciplinary exploration of the implications of changes in the patterns and tools of scholarly communication.	- COLLABORATIVE RESEARCH between library faculty and others throughout the University - EXPERIMENTATION IN NEW INFORMATION TECHNOLOGIES to design innovative systems for students and scholars

Key direction #2: COLLECTION QUALITY ENHANCED

Purdue students, faculty, and staff will have the resource materials for their teaching and research needs.

RATIONALE:

A library collection must reflect its users' primary needs and achieve a balance between those of the undergraduate, the researcher, and other users.

Collection budgets cannot keep pace with the rising costs of materials. A new equilibrium must be found between local ownership and access to information held elsewhere.

The increasingly inter- and multidisciplinary nature of teaching and research demands close collaboration among Libraries subject bibliographers and other faculty throughout the University to obtain the greatest possible value from materials allocations.

The maintenance of the local collection as a University-wide resource requires careful attention not only to the intellectual contents of materials but also to the circumstances under which the materials enter the permanent collection and the methods by which they are housed, secured, and preserved for the Purdue community.

STRATEGIES	PROGRAMS AND ACTIONS
LEAD COLLABORATIVE DEVELOPMENT OF THE PURDUE COLLECTION The Libraries will lead the Purdue community in an increasingly collaborative shaping of the Purdue collection. In-depth reference services will be responsive to disciplinary trends as well as to developments in the library/information field.	- ORGANIZATION OF LIBRARIES INTO BROAD SUBJECT GROUPS for collection development and service management - ASSESSMENT OF CURRICULUM AND RESEARCH NEEDS - REVISE DEVELOPMENT AND MANAGEMENT OF COLLECTIONS - REVISE METHOD OF FUND ALLOCATION - ONGOING ASSESSMENT OF INFORMATION NEEDS
PRESERVE AND CONSERVE MATERIALS The Libraries will implement preservation and conservation programs to ensure availability of materials to succeeding generations.	- PRESERVATION STUDY TEAM PLAN implementation begun - DISASTER RESPONSE PLAN put in place
INITIATE CONSIDERATION OF ARCHIVAL FUNCTION The Libraries will assist the University in determining its archival needs and role.	- ARCHIVES PROPOSAL prepared

Key direction #3: LIBRARY INSTRUCTION REDEFINED

Purdue students, faculty, and staff will be productive and proficient in accessing, managing, and using information.

RATIONALE:

The Libraries instructional role in the information empowerment of the Purdue community is growing in importance. As John W. Hicks has said, "Today's graduates will need to reeducate themselves every three to five years — libraries and information literacy are absolutely essential to the lifelong learning process."

Just as access to the Libraries databases and services follow the student and scholar wherever electronic links are available, so too will library instruction. Distance learning capabilities such as online access to the Libraries instructional programs will extend information skills training to residence halls and homes, and to those in Purdue programs beyond the West Lafayette campus.

STRATEGIES	PROGRAMS AND ACTIONS
PROVIDE COMPREHENSIVE INSTRUCTION PROGRAM FOR ALL LEARNERS AND SKILL LEVELS A unified, Libraries-wide instruction program will provide orientation, classroom instruction, and workshops in basic, advanced, and subject-specific information skills, including proficiency in the use of ever-changing information technologies.	- LIBRARY INSTRUCTION TEAM from across the Libraries established - COLLABORATIVE TEACHING within Libraries and with classroom faculty - CREDIT COURSE in information/library skills developed -TERM PAPER CLINICS expanded - RESIDENCE HALL orientation and instruction - INFORMATION MANAGEMENT SOFTWARE demonstrated and skills taught - WORKSHOPS for faculty and graduate students expanded
DEVELOP MULTIPLE INSTRUCTIONAL APPROACHES The Libraries will employ a variety of approaches to provide "just-in-time" training programs: instruction at the time and place it is most needed by the user.	- LIBRARY INSTRUCTION CLASSROOM equipped - USE OF COMPUTER LABS as information laboratories explored - MULTIMEDIA PROGRAMS - TEACHING STRATEGIES explored and developed for integration into curriculum -INTERACTIVE TUTORIALS AND ARTIFICIAL INTELLIGENCE on THOR explored
FACILITATE LIFELONG LEARNING The Libraries will help individuals develop expertise in library use and continue their educations throughout their lives.	- REGULAR HANDS-ON THOR TRAINING - EXPERIMENTATION IN DELIVERY OF INSTRUCTION via teleconferencing and other technologies for reaching remote learners and educators

Key direction #4: INFORMATION DELIVERY EXPANDED

Information needed by the Purdue community will be delivered rapidly from both Purdue's own collections and those located elsewhere.

RATIONALE:

Libraries have developed increasingly sophisticated ways of locating and acquiring documents and other materials, both locally and remotely. The next step is to make the various means of doing so as transparent as possible, i.e., to remove from the user the burden of determining where specific items are located and learning the variety of mechanisms for obtaining them.

STRATEGIES	PROGRAMS AND ACTIONS
STREAMLINE AND BROADEN DOCUMENT DELIVERY Increasingly over time, obtaining a document will become a simple matter of requesting it from the Libraries.	- NO-FEE DOCUMENT DELIVERY evaluated for cost-effectiveness - CAMPUS MAIL DELIVERY AND RETURN of library materials formalized - NO-FEE BORROWING FROM OTHER LIBRARIES tested and evaluated - COMMERCIAL DOCUMENT RETRIEVAL SERVICES tested and evaluated
IMPLEMENT ELECTRONIC REQUESTING AND DELIVERY Library users will increasingly utilize technology to send requests and to receive materials in a timely fashion.	- DOWNLOAD CAPABILITY for online catalog/databases - IMAGE PROCESSING AND FAX DELIVERY explored - ELECTRONIC JOURNALS and other full-text files tested - ELECTRONIC REQUESTS for items in various libraries' online catalogs, via PACLoan - "ONE-STOP SHOPPING" electronic capability for all document delivery requests

Key direction #5: INTERNAL RESOURCES OPTIMIZED

Through responsible stewardship of human and physical resources, the Libraries will provide optimum access to information resources and to the skills, technologies, and services required to use information productively.

RATIONALE

Like many other institutions in higher education and the business community, the Libraries faculty and staff are engaged in a process of quality improvement that is responsive to changes in user needs, communication patterns, funding support, and technology.

New structures, including project-oriented teams which cut across libraries and units to focus needed expertise, give the Libraries a framework for better informed and more flexible action in support of the University's mission of teaching, research, and service.

The Libraries relationship with the Purdue community, and with local, state, and national constituencies, informs its ability to provide services and collections, recruit Libraries faculty and staff, elicit University-wide support, and establish partnerships with individuals, corporations, and foundations.

STRATEGIES	PROGRAMS AND ACTIONS
EMPHASIZE CORE PROCESSES The Libraries staff and services will be organized and coordinated around the core activities of user access, collection quality, library instruction, and information delivery.	- TASK-ORIENTED TEAMS address library instruction, automation, etc. - ONGOING EVALUATION of services and collection based on user input and research
FOSTER AND SUPPORT HIGHLY-TRAINED AND WELL-INFORMED STAFF The staff will utilize continuing education opportunities on and off campus. Broadened internal communication will help focus the Libraries efforts and share staff energy, expertise, and knowledge.	- STAFF DEVELOPMENT PROGRAM - SUPERVISOR TRAINING AND EVALUATION - IMPROVED SALARIES AND WAGES - LIBRARIES CLERICAL AND SERVICE STAFF ADVISORY COUNCIL - LIBRARIES ADMINISTRATIVE/PROFESSIONAL STAFF ADVISORY COUNCIL - INTERNAL NEWSLETTER
LEVERAGE PHYSICAL RESOURCES An "academic plan" for the Libraries as a system will evaluate existing facilities in light of the strategic plan and recommend alterations and improvements.	- SPACE AND EQUIPMENT evaluated in light of core processes; critical needs identified - ENVIRONMENTAL ISSUES (lighting, air quality, etc.) explored and addressed with other Purdue departments - PLAN FOR CAPITAL EXPENDITURES to include replacement with ergonomic equipment and furniture
BUILD PUBLIC RELATIONS AND SUPPORT The Libraries will communicate regularly with friends and supporters, and seek to increase their participation as both clients and partners.	- EXTERNAL PUBLICITY efforts expanded - DEVELOPMENT EFFORT enhanced, including collaboration with schools and departments

IMPLEMENTATION AND EVALUATION

Milestones in the implementation of the plan are set forth in the following table. The planning librarian will monitor progress and report on deadlines met, modifications made, and new considerations which emerged during implementation. The Libraries will engage in an ongoing evaluation and revision of the plan based on this information, regular feedback from the Purdue community, and continuing assessment of environmental trends in higher education, scholarship, and information technology.

	IMPLEMENTATION MILESTONES				
	1992-93	1993-94	1994-95	1995-96	1996-97
USER ACCESS INCREASED	- First electronic gateway installed - Online table-of-contents service initiated - Addition of new databases begun ERIC installed - Phase 1 of PACLink implemented	- Phase 2 of PACLink implemented - New books database explored - ADA equipment installation begun - Signage improvement - Reserves system assessed - Ways to encourage collaborative research explored	- Phase 3 of PACLink implemented - Online full-text reserves database explored - Circulation of reserves automated	- Needs of distant learners and educators identified and services initiated - Experimentation in new information technologies begun	- Electronic linkages established with other Purdue networks
COLLECTION QUALITY ENHANCED	- Disaster response plan put in place	- Libraries organized into broad subject groups - Curriculum and research needs assessed - Archives proposal prepared	- Development and management of collections revised - Method of fund allocation revised - Implementation of Preservation Study Team plan begun	- Ongoing assessment of information needs begun	- Assessment tools evaluated and modified
LIBRARY INSTRUCTION REDEFINED	- Expansion of term paper clinics begun	- Library instruction team from across the Libraries established - Collaborative teaching expanded - Use of computer labs as information labs explored	- Residence hall orientation and instruction program begun - Library instruction classroom equipped - Expansion of faculty/graduate student workshops begun	- Credit course in information/ library skills developed - Information management instruction begun - Teaching strategies explored and developed - Regular hands-on THOR training instituted	- Multimedia programs developed - Interactive tutorials and artificial intelligence on THOR explored - Experimentation begun in remote delivery of instruction
INFORMATION DELIVERY EXPANDED	- No-fee document delivery evaluated for cost-effectiveness - Campus mail delivery and return of library materials formalized - Download capability added to THOR	- No-fee borrowing from other libraries tested and evaluated - Commercial document retrieval services tested and evaluated - Electronic requests for items in various libraries' online catalogs instituted via PACLink	- Image processing and fax delivery explored	- Electronic journals and other full-text files tested	-"One-stop shopping" electronic capability for all document requests explored
INTERNAL RESOURCES OPTIMIZED	- Salary and wage improvement begun - Libraries CSSAC initiated - Internal newsletter begun - Development effort enhanced, including collaboration with schools and departments	- Task-oriented teams formed - Staff development program begun - Libraries APSAC initiated - External publicity expanded - Salary and wage improvement continued	- User-based evaluation of services and collection begun - Environmental issues evaluated and recommendations developed - Equipment replacement plan developed to include ergonomics - Salary and wage improvement continued	- Supervisor training program put in place - Space and equipment evaluated in light of core processes - Salary and wage improvement continued	- Supervisor evaluation program begun

PURDUE UNIVERSITY LIBRARIES STRATEGIC PLAN -- IMPLEMENTATION MILESTONES

Revised 7/94

	1994-95	1995-96	1996-97
USER ACCESS INCREASED	**HIGHEST PRIORITY** - Phase 2 of PACLink implemented (if available) - Bill - Database access on network expanded - Bill - Online table-of-contents service evaluated - Emily **MEDIUM PRIORITY** - Additional databases selected - Cheryl - Reserves system assessment begun - Cheryl - Online fulltext reserves database explored - Cheryl and Bill - ADA equipment installation continued - David - New booklist database explored - Cheryl and Bill - Signage improvement continued - David - Ways to encourage ongoing collaborative research explored - Emily **LOW PRIORITY** - Retrospective conversion - Cheryl	**HIGHEST PRIORITY** - New access to databases continued - Phase 3 of PACLink implemented (if available) - Retrospective conversion - Experimentation in new information technologies begun - Needs of distant learners and educators identified and services initiated **MEDIUM PRIORITY** - ADA equipment installation continued - Circulation of reserves automated **LOW PRIORITY** - Hours of operation increased (later)	**HIGHEST PRIORITY** - New THOR implemented - New access to databases continued - Retrospective conversion - Electronic linkages established with other Purdue networks **MEDIUM PRIORITY** - Circulation of reserves automated
COLLECTION QUALITY ENHANCED	**HIGHEST PRIORITY** - Curriculum and research needs assessment - Cheryl - Conservator hired & laboratory set-up begun - Cheryl and David - Collection enriched as money allows - Cheryl **LOW PRIORITY** - Archives proposal prepared - Emily	**HIGHEST PRIORITY** - Development and management of collections revised - Method of fund allocation revised **MEDIUM PRIORITY** - Government publications unit enhanced (programmatic activities)	**HIGHEST PRIORITY** - Ongoing assessment of information needs begun - Assessment tools evaluated and modified
LIBRARY INSTRUCTION REDEFINED	**HIGHEST PRIORITY** - Library instruction classroom equipped and opened for use - Emily - Coursework in information/library skills developed - Phase 1 - Cheryl **MEDIUM PRIORITY** - Teaching strategies explored and developed - Cheryl - Collaborative teaching expanded - Cheryl	**HIGHEST PRIORITY** - New freshman orientation (6000 students) - Information management instruction begun **MEDIUM PRIORITY** - Regular hands-on THOR training instituted - Residence hall orientation and instruction program begun - Expansion of faculty/graduate student workshops begun **LOW PRIORITY** - Use of computer labs as information labs explored	**HIGHEST PRIORITY** - Interactive tutorials and artificial intelligence on THOR explored - Multimedia programs developed **MEDIUM PRIORITY** - Experimentation begun in remote delivery of instruction - Credit course made mandatory for incoming students

Administrative responsibilities are indicated for 94-95

(continued on next page)

PURDUE UNIVERSITY LIBRARIES STRATEGIC PLAN -- IMPLEMENTATION MILESTONES (Continued)

Revised 7/94

	1994-95	1995-96	1996-97
INFORMATION DELIVERY EXPANDED	**HIGHEST PRIORITY** - Image processing and fax delivery explored - Bill - Document delivery and borrowing services planned - Bill - Download capability for THOR investigated - Bill - Evaluation of commercial document delivery services begun - Bill - Campus mail delivery and return of library materials evaluated - Bill - No-fee document delivery evaluated - Bill - No fee borrowing from other libraries evaluated - Bill	**HIGHEST PRIORITY** - Electronic journals and other full-text files tested	**HIGHEST PRIORITY** - "One-stop shopping" electronic capability for all document requests explored **MEDIUM PRIORITY** - Fulltext electronic journals provided
INTERNAL RESOURCES OPTIMIZED	**HIGHEST PRIORITY** - Salary and wage improvement continued - Emily - Development efforts expanded - Emily - Task-oriented teams formed - Emily - Staff development program offered - David - Training for library staff re: electronic technology provided - Bill and David - External publicity expanded - Emily **MEDIUM PRIORITY** - Comprehensive equipment replacement plan developed to include ergonomics - David - Environmental issues systematically evaluated and recommendations developed - David	**HIGHEST PRIORITY** - Salary and wage improvement continued - Supervisor training program put in place - User-based evaluation of services and collection begun - Task-oriented teams formed **MEDIUM PRIORITY** - Space and equipment evaluated in light of core processes - Humanities, Social Science and Education Library reconfigured - Development efforts continued	**HIGHEST PRIORITY** - Supervisor evaluation program begun - Task-oriented teams formed - Development efforts continued

Administrative responsibilities are indicated for 94-95

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UNIVERSITY LIBRARIES
THE UNIVERSITY AT ALBANY

STRATEGIC PLAN
1990–1995

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Acknowledgements

The University Libraries' Strategic Plan is the product of a process that began more than a year ago and involved many people both in the Libraries and in the campus community. The purpose of this process was to identify major strengths, needs, opportunities, directions, goals and objectives for the University Libraries for the period 1990–95. The plan offers a vision of the future and describes a course of action to reach that likely future. The plan communicates our goals and directions to the University community. It serves as a framework for the library administration and as a guide to library managers and staff as they develop operational goals, time tables, and budgets. Special thanks are due to all members of the Strategic Planning Committee who generously gave their time and talent to this process. Thanks are also due to many university faculty and administrators who assisted the University Libraries in the preparation of this document and, in particular, to Dr. Ronald B. Hoskins, Director of University Planning.

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Summary of the Strategic Plan

After a quarter century of rapid growth and technological change, Albany's University Libraries have emerged as one of the 100 largest research libraries in the United States. The Libraries provide comprehensive services and respond to the complex and changing informational needs of a maturing research university known nationally for its academic programs, faculty accomplishments, and external grant support. In order to serve the University at Albany most fully, the Libraries launched a strategic planning process in May 1989 with the appointment of a fifteen-member committee to study the library's history and mission, values and philosophy of service, and internal and external environmental trends in order to chart strategic directions, goals, and objectives for the 1990s. The need to serve the University's undergraduate programs, expanded graduate programs, and research profile guides the University Libraries' strategic vision for the next decade.

The Environment

The electronic revolution has arguably been the most significant change in the information environment of academic and research libraries in the 1970s and '80s and will continue to exercise a profound influence on collection development, information access policies, and library governance through the 1990s. Developments in information technology and electronic transfer and storage have changed the way scholars do research and communicate their results, have influenced the way teachers teach, have transformed the curriculum and the way students learn. These changes are providing research libraries with unprecedented opportunity and formidable challenges. Perhaps the most significant challenge facing Albany's University Libraries is how to provide access to a world of abundant information being generated in ever-increasing quantities by both old and new information technologies. As part of a research institution, the University Libraries must be committed to developing those most traditional of collections—monographs and periodicals, manuscripts, archives, rare books, and other special collections which support academic programs and give the institution distinction. At the same time, the Libraries are turning increasingly to acquiring materials in various electronic formats. While printed books and serials are what a large part of the University community thinks of as library material, the electronic revolution has broadened the definition of "library collections" to include a wide variety of print, microform, audiovisual media, and electronic media. A growing portion of acquisitions funds must go for electronic media.

A second significant challenge is the need to hold serials costs steady while providing access to new research and supporting academic programs. Serials costs now absorb about 70 percent of our acquisitions budget. Continued price inflation and proliferation of serial publications are having devastating effects on our ability to acquire other materials. While the future may bring fundamental changes in serial publication and reductions in costs through on-demand access and other means, in the near term, we must seek increased funding to support Albany's expanding graduate and research programs.

A third challenge is the need to invest more of our resources to preserve the rich heritage of our collections printed on acidic paper, while, at the same time, stretching our resources to explore the promise and viability of new information technologies.

Strengths

Albany's University Libraries are educationally aggressive and future-oriented. As an integral part of a rapidly evolving institution known for the quality of its academic programs and the selectivity of its student body, the Libraries have made extraordinary progress in what has been one of the most significant periods of rapid change in the history of academic libraries. During the 1980s, the Libraries automated operations, expanded collections and services, and extended access to resources throughout New York State and the nation. In addition to holding membership in the Association of Research Libraries, the Libraries are a governing member of the Research Libraries Group and a participant in RLG's Archives and Manuscript Program. Through membership in the Center for Research Libraries and the OCLC network, the Libraries participate actively in resource sharing. Albany's Libraries also participate in resource sharing through agreements with the New York State Library, among Capital District Library Council members, and within SUNY. We are a net lender in RLG and, among libraries who do interlibrary loan on the OCLC system, Albany ranks twentieth in interlibrary lending to other academic institutions.

The University Libraries have developed extensive research collections to support the University's increasingly diverse portfolio of graduate programs, have begun to build collections in support of the jointly managed School of Public Health, and have added depth and breadth in Special Collections and archival holdings in areas such as the Archives of Public Affairs and Policy, the German Intellectual Emigré Collection, and the Historical Children's Literature Collection.

Albany's Libraries have been leaders in implementing integrated and automated technical support and public service systems for circulation, reserve, acquisitions, fund accounting, and interlibrary loan. The online catalog, Gemini, contains full bibliographic records for 90 percent of our cataloged collections and brief records for the remaining 10 percent. Gemini can be accessed electronically from 40 terminals in the University Library or the Thomas E. Dewey Library, or remotely from office, dorm room, or home.

Access to CD-ROM databases has been expanding rapidly in the past two years and the Libraries now provide fourteen microcomputing user workstations and access to more than twenty CD-ROM databases on a local area network. Users also have access to 600+ online databases through mediated searching. Microcomputing is integrated into every operation and desktop publishing is used to provide information to users. In the Interactive Media Center, students and faculty are provided an innovative learning environment and powerful educational tools to enhance teaching and learning through the use of new electronic technologies.

Albany's library faculty and staff are committed to providing excellent library services and building strong research collections. Library faculty are engaged in the life of the campus and participate actively in campus governance. They are also engaged in their profession and have earned national reputations for their expertise shared through publication and association participation.

The well developed habits of cooperation, excellent management skills, flexibility, and resilience that have characterized the library staff during the 1980s will serve the University Libraries well as we enter into a rich new phase of our development in the 1990s.

THE PLAN

Collections and Access

In the near term, the University Libraries will continue to support traditional library services and acquisition of curricular and research materials, whether printed or electronic. Even as we increase emphasis on electronic media, the Libraries will remain strongly committed to preserving both the general and special library collections.

Technology

The Libraries will continue to play an essential role in information access, analysis, organization, distribution, and management. The Libraries will selectively target resources, make effective use of technology, and work collaboratively with other campus offices to develop the University's capacity for integrated electronic information transfer. In the 1980s, electronic technology allowed the University Libraries to cope with information abundance despite a diminished acquisitions budget and workforce. If, in the 1990s, the University Libraries are to continue to serve the needs of an academic community that—like society at large—places a premium on information as a commodity, the University will need to make a substantial investment in its electronic communication systems and networks to enable the Libraries and the campus to move to a new stage of automated development. The Libraries' online, public-access catalog will have to be upgraded to facilitate better service to the University community. Eventually it will form the hub of a much larger campus information system that will deliver a variety of electronic information resources to the microcomputer workstations of faculty and students working in their offices, laboratories, residence halls, or homes. The electronic catalog will be at the center of the campus public access information network and eventually will provide access to campus data files and other information resources in addition to library holdings. At the same time, the Libraries will need to develop and manage a technologically more complex and information-rich environment that responds to the needs of diverse populations. While continuing to house traditional printed collections for research and study, the University Libraries will increasingly serve as an electronic "gateway" to information resources, wherever held, in all formats. As the 1990s progress, providing access to information via electronic networks will eventually take precedence over development and management of physical collections.

Services

Librarians will work to increase the educational impact of library services on students and faculty, to enhance the effectiveness of existing services, and to develop selective new services to meet the needs of targeted populations. The Libraries will play a critical role in integrating information into education and research.

Facilities

A second and no less important investment will be the planned construction of a new library facility on the uptown campus to provide 73,000 additional net square feet of space for expansion of library services. With a solution to the University Library's space needs underway, securing additional space for expansion of the Dewey Graduate Library on the Rockefeller College campus will assume greater importance in the University's planning for the 1990s. By 1996, the Libraries will provide decentralized services in at least three sites on two campuses.

Human Resources

The strength of the University Libraries is as much a function of personnel as of collections and facilities. For this reason, the University Libraries are committed to increase staffing levels in targeted areas; to hire and train an outstanding and innovative staff; to recruit a culturally diverse workforce; and to provide all library employees with opportunities for professional development and a working environment that encourages accomplishment. In the 1990s librarians will function increasingly as educators who enrich the curricular lives of students and as collaborators who work with the teaching faculty and other professional colleagues in managing and transferring scholarly information. In short, the University Libraries will work to enhance the role of librarians as active participants in the educational community.

Fiscal Resources

To accomplish the goals set out in the strategic plan, the University Libraries will allocate existing resources judiciously, identify resource needs based on action priorities and seek additional funding. The Libraries will pursue grant and foundation funding vigorously and increase efforts to raise funds from external sources through the University's capital campaign.

Outlook for the Future

With intelligent long-range planning, the University Libraries' future should be bright, though it may be somewhat constrained in the first half of the 1990s by the Empire State's fiscal austerity and resulting diminished fiscal commitment to public higher education. For the State University of New York and the University at Albany, this may be a period in which new sources of funding will be targeted to specific goals and general programmatic advancement will require innovation and creativity. Our strategic vision for the University Libraries in the 1990s, finally, is one of dynamic response to academic growth and distinction in a period of information abundance. We face the next decade confident that a dedicated library staff will make effective use of both traditional collections and new information technologies in service to an outstanding undergraduate student body, an ever-changing research university, expanded graduate programs, and a more culturally diverse academic community.

Envisioning the University Libraries in the 1990s

The University Libraries of the University at Albany, State University of New York, are among the top 100 research libraries in the nation. Like our parent institution, we are a complex organization that has undergone and is continuing to experience rapid change. The Libraries must serve a vast array of needs on the campus and in the community and are continually buffeted by the rising expectations of students and scholars in this age of information overabundance. As the Libraries look toward the new decade and chart strategic directions, our view is framed by the context in which we operate. We are an integral part of a rapidly expanding research university and one of the most selective public institutions of higher education according to *Barron's Guide*.

The University at Albany is the senior campus of the largest centrally managed system of higher education in the country and one of four university centers in the SUNY system. Albany enrolls more than 16,000 graduate and undergraduate students taught by more than 650 full-time equivalent faculty. In the past decade, the University has experienced rapid growth and development of its undergraduate and graduate programs. It now offers approximately 100 bachelors, 65 masters, and 28 doctoral programs in areas of the humanities, fine arts, sciences and mathematics, social and behavioral sciences and in the University's professional schools. Master's degrees are offered in all 10 colleges and schools of the University as well as in Interdisciplinary Studies. Graduate certificate programs are available in many areas, as are Certificate of Advanced Study programs and combined bachelor's/master's degree programs. Additionally, research activity at the University and external support for research has increased significantly placing the University at Albany in its current national ranking.

Over the past decade the University at Albany has evolved into a major research university and requires comprehensive research library services to support its expanding programs. What is perhaps most remarkable is that this decade of rapid growth and development in excellence has taken place in the context of a state experiencing dramatic demographic changes and a declining industrial base. Constrained perhaps by limited fiscal resources, New York State's financial commitment to public higher education in the past decade has decreased when compared to the rate of investment in earlier decades. For the State University of New York and the University at Albany, the 1990s may be a period of continued austerity in which new sources of funding will be targeted to specific goals and general programmatic advancement will require innovation and creativity.

In the 1990s, then, Albany's University Libraries will operate within the context of a maturing research university gaining national visibility for the strength of its undergraduate program and the growing excellence of its graduate programs, its faculty and their research accomplishments. The University Libraries will continue to operate as an integral part of the educational and research programs of the University at Albany. The Libraries' future may be constrained by limited financial resources in the early half of the 1990s. At the same time, the Libraries will need to develop and manage an increasingly technologically complex and information rich environment which responds to the needs of diverse populations. If the Libraries are to serve the needs of the campus, the University will need to make a substantial investment in its electronic communication systems and networks to enable the Libraries and the campus to move to a new stage of automated development.

A second substantial campus investment in the University Libraries will be dedicated to the construction of a new library facility on the uptown campus to provide additional space. A new facility of 141,000 gross square feet, planned for 1995–96, will provide 93,500 net square feet of space for library expansion. As selected collections and services are moved to the new separate facility, 23,500 net square feet of space in the University Library building will be reallocated to academic purposes. The net gain of additional space for the Libraries will be 73,000 square feet.

With a solution to the University Library's space needs underway, securing additional space for expansion of collections and services of the Dewey Graduate Library on the Rockefeller College campus will assume greater importance in the University's planning for the 1990s. The picture of the future that emerges for the University Libraries is that of increasing decentralization. Both the expansion of electronic networks and the expansion of the physical facilities will speed the decentralization of library services and collections. For the latter half of the decade, the Libraries will provide decentralized services in at least three sites on two campuses.

In the near term, the University Libraries will continue to support traditional library services and will continue to place emphasis on acquiring library collections. At the same time, the Libraries will selectively target resources, make effective use of technology, and work collaboratively with other campus offices to develop the University's capacity for integrated electronic information transfer. The Libraries will continue to play an essential role in information access, analysis, organization, distribution, and management. Our online catalog will eventually form the hub of a much larger campus information system that will deliver a variety of electronic information resources to the microcomputer workstations of faculty and students working in their offices, laboratories, residence halls, or homes.

The Libraries' online catalog will be at the center of the campus public access information network and eventually will provide access to campus data files and other information resources in addition to library holdings. Librarians will play a key role in developing students' information management and information literacy skills so that they may take full advantage of educational resources and new technologies. This is the future the Libraries envision. It builds on past achievements and the substantial investments the University has made in automation. It also realizes the promise of library automation efforts to date—to ensure faculty, students, and community users access to information-based services, collections, and library services, and to integrate these into the research, teaching, and service functions of the University.

If the Libraries are to accomplish the ambitious goals we have set for ourselves, additional and substantial resources must be forthcoming. These resources will be necessary to support the rapid move to the fully integrated electronic library engaged in local, regional, and national networks of information transfer. The Libraries will work closely with other campus units to provide the array of services, collections, and access tools needed to support research and instructional programs and to provide decentralized access to a rich and growing variety of print and electronic research and information resources. We will use resources judiciously to give students and faculty what they need to pursue their educational and research goals in this academic institution.

But before we proceed with plans for the future we imagine, it is important to pause a moment to acknowledge the past from which Albany's University Libraries have evolved.

Historical Sketch of the University Libraries

The growth of collections, staff, and facilities in support of a defined institutional mission and the provision of library services to support and enhance the educational process have been the hallmark of Albany's University Libraries for almost a century and a half. Preparation of teachers for careers in the public schools of New York State was the mission of the predecessors of the University at Albany from 1844 to 1962. During these 118 years, the library supporting this educational mission grew from an unstaffed collection of donated textbooks in an old railway depot to a respectable college library with some 75,000 volumes and a staff of eight. But the library's mission changed almost overnight as a result of the state's decision to transform the well-respected teachers' college at Albany into one of four university centers in the rapidly growing State University of New York. "The Library," observed David Boroff in a 1962 article in the *Saturday Review*, "is cramped but friendly and reflects the ambivalent character of the college, torn between its role as a teacher training institution and a college of liberal arts."

In just over a quarter century, Albany's University Libraries have grown along with the University in response to a redirected institutional purpose. The period from 1962–1973 was one of almost uncontrolled expansion, as the University's faculty, student population, and facilities grew to university proportions. Even before the 1968 move to the new library building designed by architect Edward Durell Stone, "frenzied buying" of both new and out-of-print materials came to characterize the University Libraries. Director of Libraries J. R. Ashton wrote in 1970, "the Library grew in exactly the same way that the University has grown and reflects in microcosm the results of the mixture of expediency and grandiose planning which characterized the last few years." In this period collections expanded tenfold to some 800,000 cataloged volumes and staff sixfold to 49, and the Libraries experienced the accompanying "growing pains" of huge cataloging backlogs, staff turnover, and seemingly endless reorganization.

But the "extraordinarily rapid growth" that the Middle States Association Evaluation Report concluded in 1971 was the principal characteristic of the University Libraries could not continue. State budget austerity at the end of Nelson A. Rocke feller's governorship resulted in a reduced growth rate for the University at Albany and the rest of the SUNY system. Holdings continued to grow throughout the 1970s, but at an annual rate that was less than half the 1960s rate of expansion.

As collections and services expanded during the 1970s to support the programs of an increasingly comprehensive university curriculum, the University Libraries continued to experience rapid change. By 1975 Albany's Libraries had achieved recognition among distinguished research libraries and were invited to membership in the Association of Research Libraries. While fewer books were added to collections, advances in technology began to balance the decline in collection growth and made possible the development of cooperative bibliographic networks, improved access to library collections, and resource sharing. Membership in the Center for Research Libraries (CRL) (1973), the Ohio College Library Center (OCLC) (1973), and the Research Libraries Group (RLG) (1984) advanced the Libraries capacity for cooperative access to research collections and resource sharing.

In the 1980s the University at Albany evolved into a nationally recognized research university, and in 1982 the University Libraries celebrated the acquisition of the millionth volume. Continued growth in graduate education and research and the rapid evolution of technology led to many fundamental changes in the services and operations of the Libraries. In 1980 the Libraries had an antiquated automated circulation system with 30 staff terminals and five public terminals. By 1990 we offered a fully integrated online library system supporting circulation (1984) and reserve (1986) operations, acquisitions processing (1986), and the online catalog and catalog maintenance (1986), with 45 staff terminals, 40 public access terminals, and 8 dial-up lines. Approximately 90 percent of the cataloged holdings were represented in the online catalog, Gemini, in full bibliographic records and the remaining 10 percent had brief records.

In 1990 Albany's University Libraries contain rich and varied collections in a variety of formats. Users have access to the Libraries' nearly 1.3 million cataloged volumes, nearly 17,900 periodical and serial titles, more than 2.4 million microform items, and a growing collection of computer software, videodisks, videotapes, and CD-ROMs. The Libraries are integrating electronic technology more fully into services and using it to expand access to research materials throughout the world. Reference and computer search services provide access to more than 600 online bibliographic and non-bibliographic databases. Fourteen CD-ROM workstations provide users access to information in many fields of research. These services are in heavy demand and are expanding rapidly. The Interactive Media Center in the University Library, provides 20 workstations in which microcomputers are integrated with laserdisk, CD-ROM, audio, and video technologies for student and faculty use. Administrative operations are also heavily supported by microcomputing, including desktop publishing capability, and the development of a computer-based management information system for administrative operations is underway. In the next phase of technological development, the University Libraries will be the hub of a campus-wide integrated information/communication network which will provide access and delivery services on a national and international scale.

As the University at Albany attains the status of a comprehensive research university, its University Libraries reflect that status in the depth and breadth of collections and in the comprehensiveness of services to students, faculty, and community users. The University Libraries continue to evolve to meet the changing needs and maturing mission of the University at Albany.

Mission and Goals of the University Libraries

As an integral part of the University at Albany, the University Libraries strengthen and enhance the University's research, teaching, and public service programs. The University Libraries develop, organize, preserve, interpret, and promote the use of research and informational resources in all formats appropriate to the mission of the University. The University Libraries facilitate access to information through the acquisition of materials; the sharing of resources via local, national, and international networks; the effective application of technologies; and the provision of quality informational services and user education programs.

Within the general mission of the University Libraries, the Governor Thomas E. Dewey Graduate Library for Public Affairs and Policy supports the research, teaching and public service interests of the professional schools within the Rockefeller College: Criminal Justice, Information Science and Policy, Public Affairs, and Social Welfare. It provides access to information needed for the education and research of the faculty and students it serves. In its association with one of the nation's foremost educational institutions of public affairs and policy, it serves as an information laboratory for the education of policy researchers and professionals. It also holds, by extension, a trust to make information available to individuals, groups and agencies that have an interest in the formulation and analysis of public policy.

Inherent in the mission of the University Libraries are several commonly understood principles, some shared values, and some assumptions about the future of the University Libraries.

First and foremost is the recognition that the University Libraries are engaged in education and that librarians are and must continue to be active participants in the educational community. Second is the recognition that librarians have unique responsibility to identify, select, acquire, analyze, organize, and preserve materials to meet the needs of present and future generations of students and scholars. Librarians provide access to materials, but more important, they are involved in the very content of information, its analysis and organization, to make it readily retrievable. Third is the recognition that Albany's University Libraries, like other academic and research libraries throughout the nation, cannot be self-sufficient. Our ability to provide timely access to scholarly information on a national and international scale is irrevocably tied to our capacity to join, support, and expand electronic scholarly information networks such as the Research Libraries Group, the Center for Research Libraries, the Association of Research Libraries, and others. Fourth is the recognition that the University Libraries must nurture and develop our human resources and assist staff to keep current with the rapidly changing environment in which they work. And finally is the recognition that the University Libraries, even as we assume an enhanced role as a gateway to information resources on a national and international scale, will continue to be a physical entity, a place for independent study and learning, a place for students to pursue self-education outside the classroom.

In order to carry out our mission, the Libraries pursue several goals:

1. Increase and manage collections of materials in diverse formats to support the University's academic and research programs. Strengthen resource sharing arrangements to provide access to materials available in other libraries and through national networks. Preserve both the general and special library collections.

2. Facilitate access to collections and information through expansion of Gemini and other library resource networks and improved user services.

3. Expand electronic communications capabilities to enhance library services and service delivery.

4. Provide facilities and services that are efficiently organized and well equipped and maintained to facilitate the productivity of staff and users.

5. Increase staffing levels in targeted areas. Recruit, hire, and train outstanding staff and deploy them effectively to support services and programs.

6. Increase the University Libraries' visibility and image through creative public relations, outreach activities, and public programming. Identify areas of excellence that can form the basis of fund raising for the University.

7. Increase the diversity of the library staff through active affirmative action recruitment. Create an environment that encourages accomplishment, assists staff to be successful, and facilitates the retention of a diverse staff.

The action steps to accomplish these goals are detailed in pages 27–40 of this document.

Organizational Values and a Philosophy of Service

While engaged in the process of strategic planning, the staff of the University Libraries identified a number of professional and organizational values which form the bases of the Libraries' philosophy of service and give shape and direction to our mission and goals.

Focus on the User

In the 1980s the University Libraries placed primary emphasis on the automation of internal operations and on building an information infrastructure. In the 1990s our focus is delivering traditional and electronic services to the user. Technological enhancements will provide interconnectivity of systems, decentralization of services, and improved access and delivery to users at all levels. Librarians will play a crucial role in identifying user needs and designing services to serve those needs.

Library as Place/Library as Gateway

A strongly shared belief is that the University Libraries will continue to be vital places for self-education and learning, for research and scholarship. We will continue to serve as primary access points for print resources and will take on increasing significance as a "gateway" to information resources. Using electronic networks accessed through and perhaps managed by the University Libraries, students and researchers will quickly identify needed bibliographic and non-bibliographic resources and eventually gain access to full-text, graphic images, and other information formats.

Librarians as Educators and Collaborators

The teaching of students is a fundamental obligation of the university and librarians must be full participants in the educational process. The University at Albany enrolls very bright undergraduates, but there is a growing gap between the information abundant environment in which students are expected to succeed and the information management skills they bring to the task. Librarians possess knowledge and skills which can enrich the curricular lives of students and contribute to their self-education and learning. Librarians need to be actively engaged in collaboration with teaching faculty and with other professional colleagues in the 1990s. They also need to be more fully involved in planning for campus-wide information systems and the development of information policies.

Organizational Diversity and Flexibility

The University Libraries will continue to be buffeted by rapid changes in electronic technology. We are experiencing increasing diversity of clientele, of services, programs, collections, and user expectations. In the 1990s the University Libraries need to be a more flexible and experimental organization. Proactive and innovative staff will collaborate more fully to respond to continuing complexity at all levels of the organization. Library administration will foster inter- and intra-institutional cooperation, and coordinate services on a regional, national, and international level.

Strategic Directions for the 1990s

Collections & Access

The University Libraries will engage in proactive collection building of curricular and research materials in an expanding variety of formats and increase our ability to access and retrieve information. In the near term we will operate parallel systems of traditional access to information in print media and new electronic access systems for regional, national, and international collections and databases. We will increase our emphasis on coordinated collection development, resource sharing, and preservation of materials, especially with regional libraries, SUNY University Centers, and academic libraries in the Research Libraries Group.

Services

Librarians will work to increase the educational impact of library services on students and faculty, to enhance the effectiveness of existing services, and to develop selective new services to meet the needs of targeted groups. The Libraries will increasingly serve as a gateway for information access, transmission, and delivery, and will play a critical role in integrating information into education and research.

Facilities

Library administration and staff will plan for the move of selected collections and services to a new library building in 1995–96. We will plan for the rearrangement of collections and services in the University Library to make more efficient use of resources, reduce space needs, and provide quality services.

Human Resources

The Libraries will work to enhance the role of librarians as active participants in the educational community, increase the diversity of the staff, increase salaries, maintain quality, and enhance the professional development and mentoring of all staff.

Organization

The Libraries will streamline our organizational structure to foster a collegial working environment in which expertise is shared and staff work collaboratively to develop and implement library programs responsive to the needs of clientele.

Technology

The Libraries and the University will work to develop the Libraries' automated systems and capacities to create timely information transfer and delivery systems in a networked environment. Our goal is to provide faster, more convenient access to both locally owned and remotely held information, including eventually, full-text and graphics. Additionally, we will continue to make effective use of technology to establish bibliographic control of and manage print sources, computer files, audio, and video formats.

The Integrated Information System: Strategic Directions and Capabilities

Today's Automated Information System

The University Libraries' GEAC automated system, fully operational for several years, supports circulation and reserve room operations, acquisitions ordering and processing, fund accounting, the online catalog, and catalog maintenance. The Library's online catalog, Gemini, contains information on the cataloged collections in both libraries and can be searched at 40 public access terminals in the libraries, or accessed through 8 dial-up lines from home or office computers. The online catalog has been enhanced significantly in the past year by continued progress in retrospective conversion (90% of cataloged items are available in full bibliographic records, the remaining 10% have brief records). While our present GEAC system serves the libraries' needs in many ways, the system is unable to provide many new functionalities required by today's complex information environment. It has reached its capacity and must be upgraded or replaced in the near future.

Tomorrow's Integrated Information System

The University Libraries and their Integrated Information System will serve as the hub of a campus information network. In addition to supporting internal library operations in new and enhanced ways, the system will serve as an electronic gateway to campus systems and databases, to the collections of other academic and research libraries, and to the databases and other products of national and international information networks and suppliers.

Integrated National Network

Compatibility and interconnectivity with national information systems through a user-friendly gateway is a basic requirement to provide:

> direct exchange of information via electronic mail;
>
> document transmission from library to library or library to user;
>
> access to remote files and databases such as library catalogs, library or university computers upon which commercially available databases have been mounted, full text databases;
>
> access to networked databases such as RLIN and OCLC;
>
> the capacity to take advantage of Linked Systems Project (LSP) developments to facilitate both interinstitutional resource sharing and local processing operations.

Compatibility with national commercial systems through a gateway that includes an accounting function or an ability to direct fees for services to a variety of accounts is a basic requirement to provide:

direct links to document suppliers, with option to receive materials in printed or digital form;

direct links to the book trade to speed communication and delivery of materials. This should include sending orders for materials via a telecommunications network rather than the mail and receiving transmissions of status reports, invoices, bibliographic records electronically in real-time.

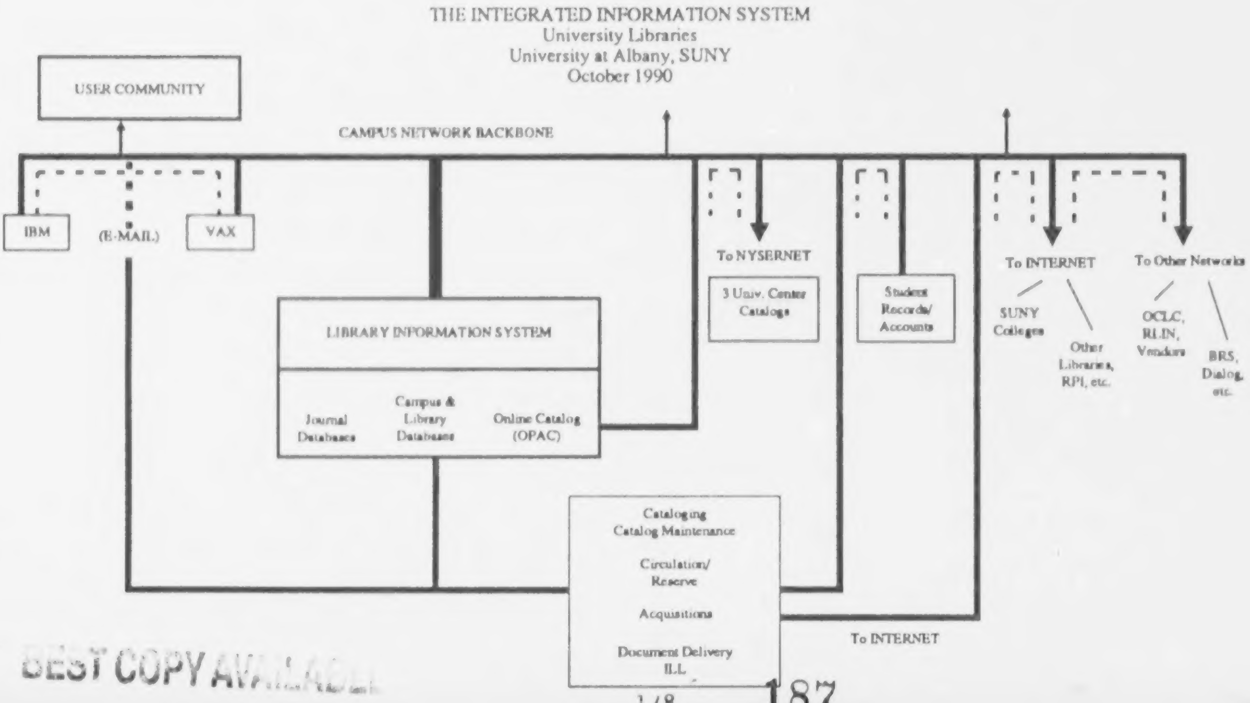
Many of these capabilities are not yet available on only one system, but we plan to choose a system that positions us to take advantage of these capabilities as they are developed and become affordable.

Integrated Campus Network

All library holdings should be available to campus users through the campus network or by dial-up access from office, home, or residence hall. This remote access should provide full functionality and should not be abbreviated or limited in any way.

Additional databases should be mounted on campus mainframe computers or on CD-ROM networks, whichever provides the best combination of accessibility, cost, and function. Mainframe databases should be accessible through the campus network and by dial-up from residence halls, homes, and offices. CD-ROM databases should be made accessible through the campus network as widely as licensing restrictions permit, or should be converted to mainframe databases as usage indicates need.

All databases, whether accessed remotely, on campus mainframes, or on CD-ROM, should use the same search command language whenever possible. Due to their specialized nature, however, CD-ROM databases will continue to require the use of various search commands.


THE INTEGRATED INFORMATION SYSTEM
University Libraries
University at Albany, SUNY
October 1990

USER COMMUNITY
CAMPUS NETWORK BACKBONE
IBM
(E-MAIL)
VAX
LIBRARY INFORMATION SYSTEM
Journal Databases
Campus & Library Databases
Online Catalog (OPAC)
To NYSERNET
3 Univ. Center Catalogs
Student Records/ Accounts
To INTERNET
SUNY Colleges
Other Libraries, RPI, etc.
To Other Networks
OCLC, RLIN, Vendors
BRS, Dialog, etc.
Cataloging
Catalog Maintenance
Circulation/ Reserve
Acquisitions
Document Delivery
ILL
To INTERNET

BEST COPY AVAILABLE

SPEC

SYSTEMS AND PROCEDURES EXCHANGE CENTER

SELECTED READINGS

ASSOCIATION OF RESEARCH LIBRARIES OFFICE OF MANAGEMENT SERVICES

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NOTE: This is not meant to be an exhaustive list of pertinent titles on strategic planning in libraries, but rather consists of titles which were useful to the survey respondents.

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